

THE ILLUSTRATED LONDON NEWS



No. 504.—VOL. XIX.]

SATURDAY, JULY 26, 1851.

TWO NUMBERS, 1S.

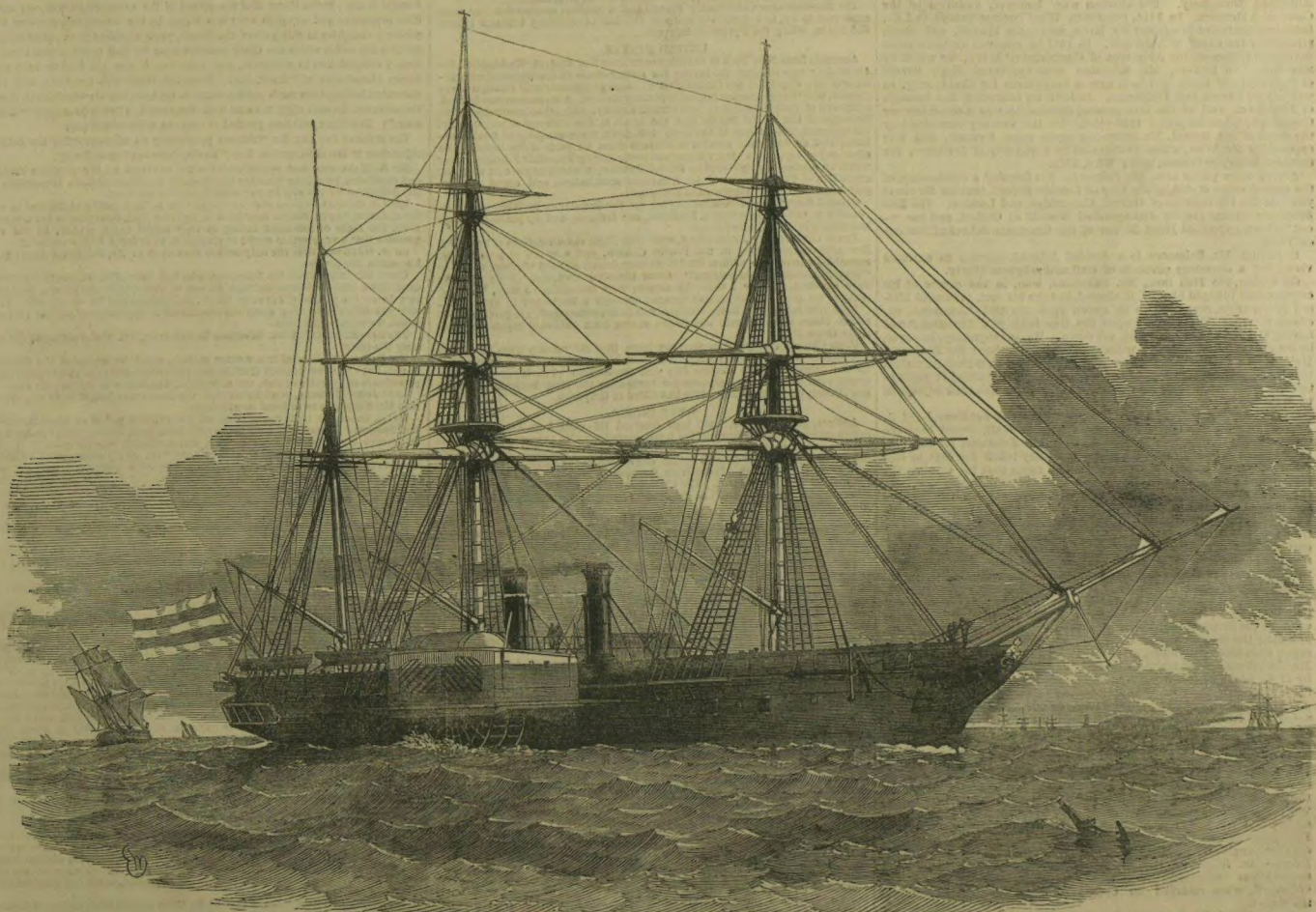
THE JEWISH QUESTION.

FIVE times the House of Commons, by large majorities, has affirmed that British Jews are entitled to all the privileges of British citizenship; and five times the House of Lords has denied the proposition. The electors of the city of London have twice deputed a Jew to represent them in Parliament; and the constituency of the metropolitan borough of Greenwich have once imitated their example. The House of Lords, however, sets all these things at naught; and, braving not only the past, but all future consequences, determines that in an assembly over which it ought constitutionally to exercise no control, no Jew, if he be sufficiently impressed with the sanctity of an oath to decline swearing on the "true faith of a Christian," shall be the nominee and representative of Christians. The case altogether is a very singular, and threatens to be a mischievous one; and will assuredly, if not speedily settled, open up many other questions, which it would be far better not to meddle with. The scenes enacted in the House of Commons during the past and present week are of themselves sufficiently inconvenient to cause the House of Lords to reflect upon what it has done, and to make the cool, clear heads of that assembly anxious for a solution of the question which shall prevent such scenes in future, and remove all possible ground for collision between the two branches of the Legislature. The House of Lords should remember not only what it can do, but what it cannot undo. Though it will not allow Jews to sit in Parliament, it has, in unison with the other two branches of the Legislature, permitted Jews to elect members to that assembly. The Jews may not make laws in this Christian country, but they may make the law-makers, and they may be, and are, continually called upon to act judicially. Mr. Salomons, whom the Lords will not permit to sit



MR. ALDERMAN SALOMONS, M.P. FOR GREENWICH.—FROM A DAGUERRETYPE BY BEARD.—(SEE NEXT PAGE.)

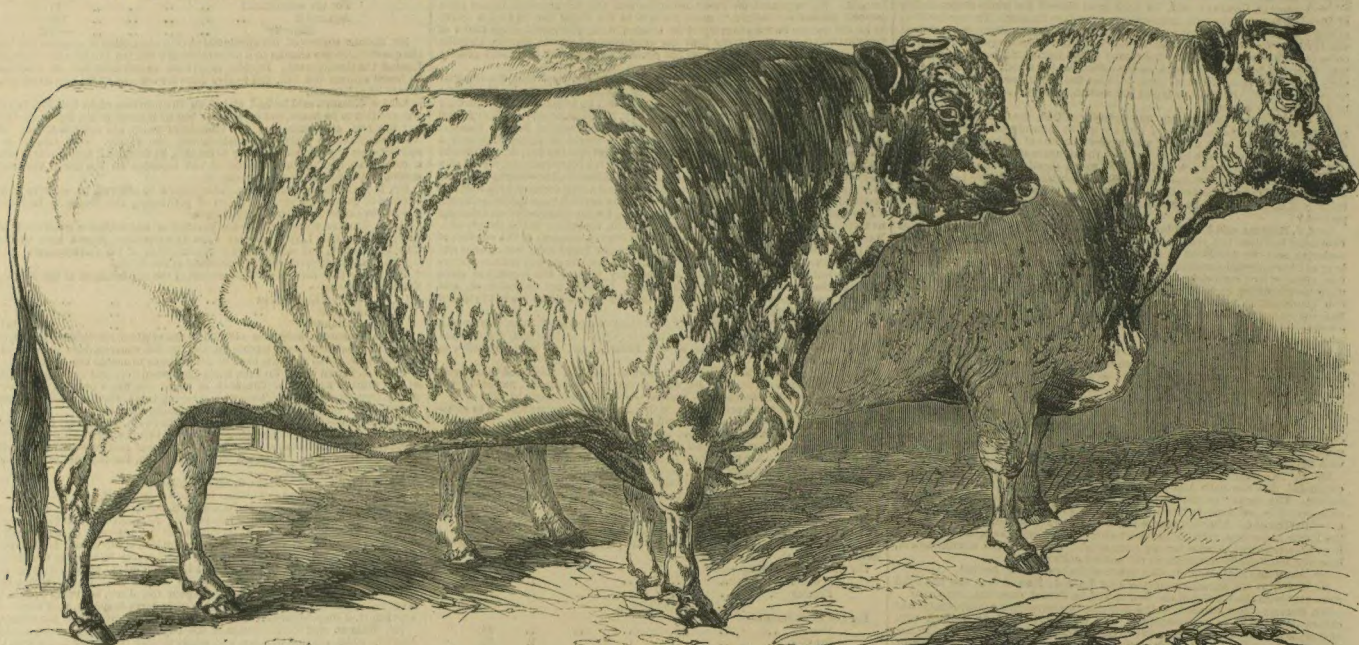
in the Commons, is a magistrate and a judge. Jews are not only voters and jurors, but sheriffs, aldermen, Lords Mayor, and town and country magistrates, and justices of the peace. If chosen in some cases to heavy fine for refusal. If they plead their religion as a disqualification for serving as jurors, and disobey the order of a judge of the superior courts to take their places in the jury-box, they may be committed to prison; and if they refuse to execute the responsible office of Sheriff, the penalty of £500 levied upon them shows the high sense entertained of their fitness, and the displeasure of their countrymen that men so well qualified should deprive the state of their services. Why the House of Lords, knowing all these things, and seeing the current of public opinion, should persist in retaining the last useless mark of political and social degradation accidentally affixed upon the Jews, surpasses the wisdom of most people to discover. It is worthy of particular notice, that there is, strictly speaking, but one branch of the Legislature that has and will have nothing to do with the Jews; for, while the House of Commons affirms and re-affirms its wish that Jews, who help to make its members, should become members themselves, the Queen receives and approves of them as Sheriffs and magistrates, and, what is more, confers upon them the hereditary rank of Baronet—an order of nobility of a high and honourable character. Should the Sovereign be advised to go one step further, and elevate a Jew to the Peerage, the House of Peers—the mere creation of the Sovereign's breath—could scarcely so affront the "fountain of honour and dignity," as to deny the Queen's right. Such an attempt to force a solution of the difficulty is, no doubt, extremely improbable, but it is not impossible, and would not be illegal; and the mere consideration of the impolicy of a difference between the Crown and the Peers upon a question of honour, ought to suggest



THE NEW SPANISH STEAM-SHIP "YSABEL LA CATOLICA."—(SEE NEXT PAGE.)

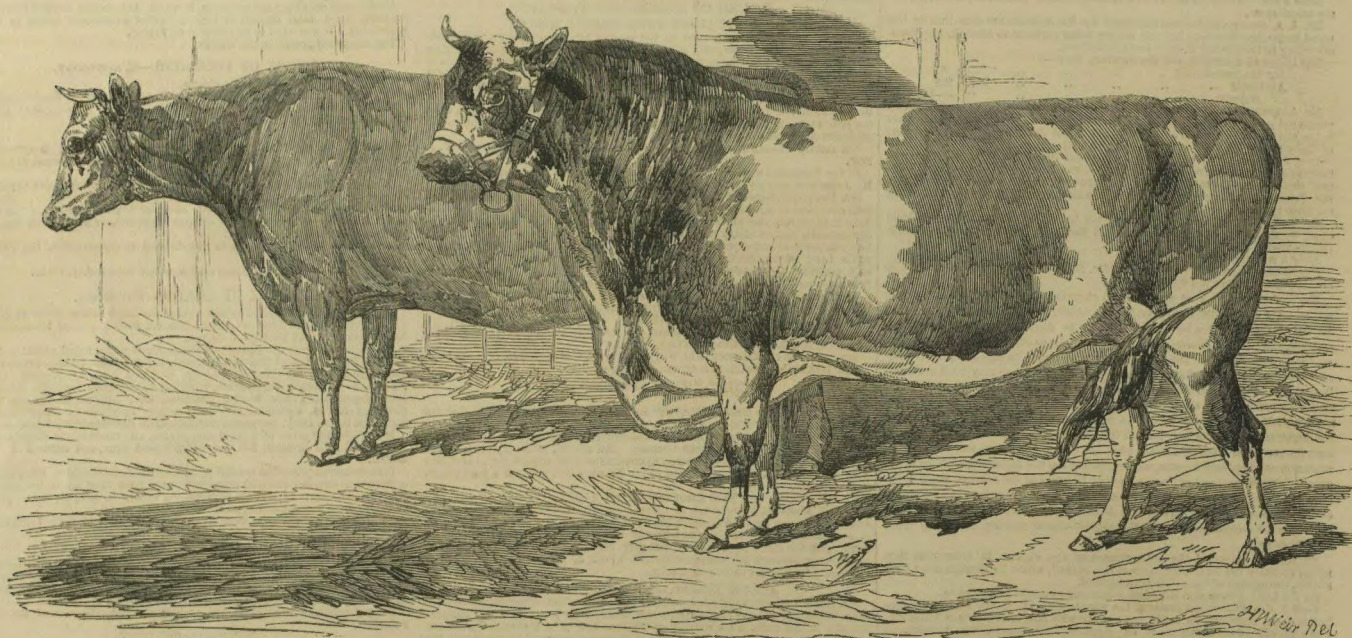
question of this oath, the House ought to be very careful how it expelled Mr.

PRIZE CATTLE AT THE ROYAL AGRICULTURAL SOCIETY'S SHOW, AT WINDSOR.



SHORT HORNS.—CLASS 1.—FIRST PRIZE, £40

SHORT HORNS.—CLASS 1.—SECOND PRIZE £20



CHANNEL ISLANDS.—CLASS 3.—FIRST PRIZE, £10.

CHANNEL ISLANDS.—CLASS 1.—FIRST PRIZE, £10.



DEVON.—CLASS 1.—FIRST PRIZE, £40.

HEREFORD.—CLASS 1.—FIRST PRIZE, £40.



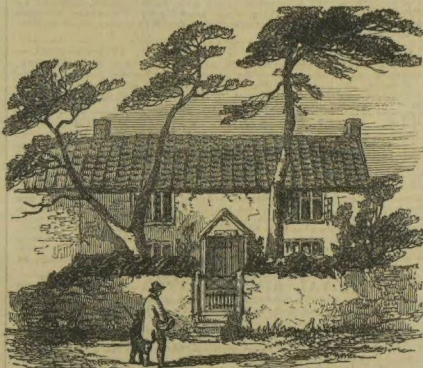
SCOTCH FOLDED.—CLASS 1.—FIRST PRIZE, £10.

THE ROYAL AGRICULTURAL SOCIETY'S PRIZE
CATTLE.—THE ILLUSTRATIONS.

THE Cattle which we have selected for Illustration are Class 1, a 4 years and 9 months old short-horned bull, which obtained the first prize of £40, bred by Mr. Henry Lister Maw, of Tetley, near Crowle, Lincolnshire, and exhibited by Mr. Thomas Wetherell, of Kirkbridge, near Darlington. This remarkably fine animal partakes in some degree of the large Holderness breed. In the same class, we give an Engraving of a 6 years and 1 month old short-horned bull, exhibited and bred by the Right Hon. Lord Hastings, of Melton Constable, near Thetford; of the Herefords, an Engraving is given of the bull exhibited by the Right Hon. Lord Berwick, aged 4 years and 6 months. This is a very fine, symmetrically formed animal, but decidedly too fat. Whether fat or lean, this animal would have looked well, possessing as it does every deserving point, which is more than can be said of one which obtained a prize in the same class—the imperfections of the one alluded to being covered in consequence of being over-fed.

We have already briefly noticed the generally good character of the Devons; and an inspection of the Engraving given this day of the 3 years and 5 months old North Devon bull exhibited and bred by Mr. John Quarley, near South Molton, will show that they have not deteriorated since the Exeter exhibition: this bull obtained the first prize of £40 in the Devon Class.

The show of Channel Island Cattle was very numerous. We have selected for Illustration a 3 years and 6 months old pure Guernsey in-calf Cow, bred by Peter Le Page, of St. Martin's, Guernsey, and exhibited by Mr. George Torode of the Forest, Guernsey, which obtained the prize of £10; and a 3 years and 13 days old, Channel Islands bull, bred



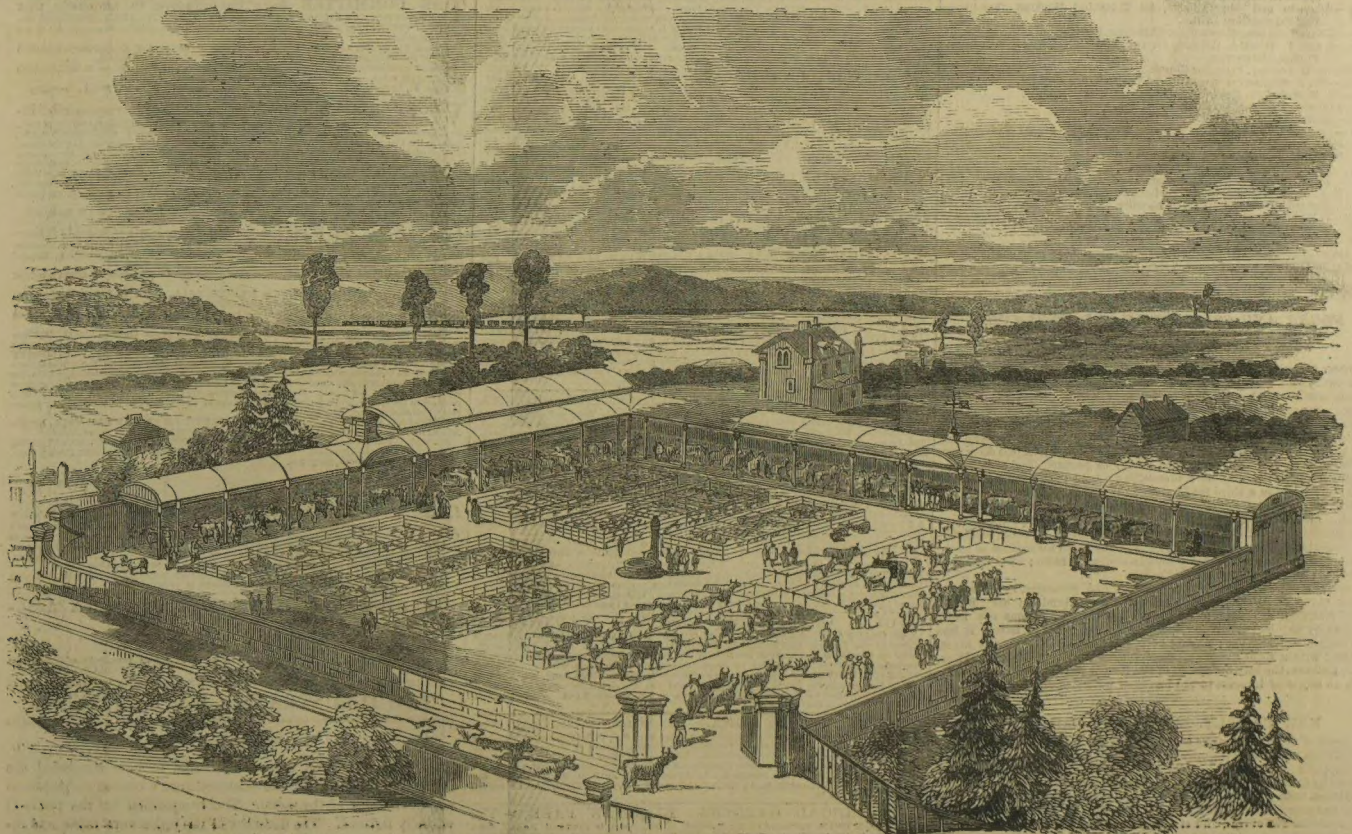
"COLERIDGE'S COTTAGE," CLEVEDON.—(SEE NEXT PAGE.)

PURE ITALIAN BULL.

and exhibited by the Right Hon. the Earl of Egmont. Each animal is remarkably fine of its class.

We also this day give an Engraving of a Suffolk bull which obtained the first prize of £10. It is 4 years and 1 month old, bred and exhibited by Lieut-General Sir Edward Kerrison, of Oakley Park, Suffolk. This was exhibited amongst the miscellaneous or extra class, in which was also shown a 5 years and 1 month old Italian or Roman bull (see Engraving). The latter animal is a specimen of the cattle which range in the Maremma, the Pontine, and other marsh lands in Italy. An inspection of the Engraving will remind those readers acquainted with ancient sculpture of the resemblance between the animal under notice and that of many sculptured works in the form of friezes, &c., representing sacrifices, processions, &c.

In the extra class of sheep there were some curious animals, such as a pen of Shetland ewes and a Herdwick tup, the latter exhibited by Mr. Robert Kirby, of Colt-house, near Hawkshead, Lancashire. The Herdwicks are a race of sheep found to do the best on our highest English mountains, such as Helvellyn, Conistone, Old Man, &c., in which district they are justly much esteemed. The true kind are remarkable for having 14 ribs. Their origin and history are involved in great obscurity. Their introduction into the Lake district is said to have been in consequence of some sixty or seventy being saved from a vessel shipwrecked near Whitehaven, about a century ago, after which they were turned on to the bleak fells, near Wartwater. Their sagacity and hardihood eventually obtained the notice of the flock-owners; and their breeding is now most carefully attended to, as much so as the finest cattle in England. An undergrowth of hair occurs beneath the wool in the Herdwicks—an indirect evidence of their hardy character.



NEW CATTLE-MARKET AT CROYDON.—(SEE NEXT PAGE.)

minutes adopted the second necessary step in the process; and

The local papers mention a considerable mortality amongst horn cattle in Tipperary, from diseases of the lungs.

F I N E A R T S .



EXHIBITION OF THE NEW SOCIETY OF PAINTERS IN WATER-COLOURS.—"ITALY.—LA SALTARELLA."—BY CHARLES VACHER.

ITALY—LA SALTARELLA.

THIS highly picturesque work is one of Mr. Charles Vacher's contributions to the present Exhibition of the New Society of Painters in Water-Colours, in Pall-mall; and we are happy to add, the ready recognition of the great merit of this picture appears in the word "Sold" affixed to it.

The scene is the grounds of an Italian inn, shaded by luxuriant foliage upon lofty trellis-work. Everything around denotes ease and enjoyment. The couple at the table are happy over their flask; there is a gossiping pair at the window, and at the wall beneath. Still more at ease are the various conversational groups upon the ground; and in the middle distance a gay couple are dancing "La Saltarella." Beyond them is a charming picture of bright blue water, rugged mountains, and

cerulean sky. The composition is throughout clever, and the colouring sparkling and characteristic throughout.

The second Illustration is from Mr. O'Neil's only contribution (514) to the present Exhibition of the Royal Academy, in whose catalogue it is thus designated:—

"That night the King (Ahasuerus) could not sleep, and he commanded the chronicles to be brought; and the scribes read them unto the King. "Now Haman was in the court, coming to speak to the King to hang Mordecai on the gibbet that he had prepared for him."—*Ether, v.*

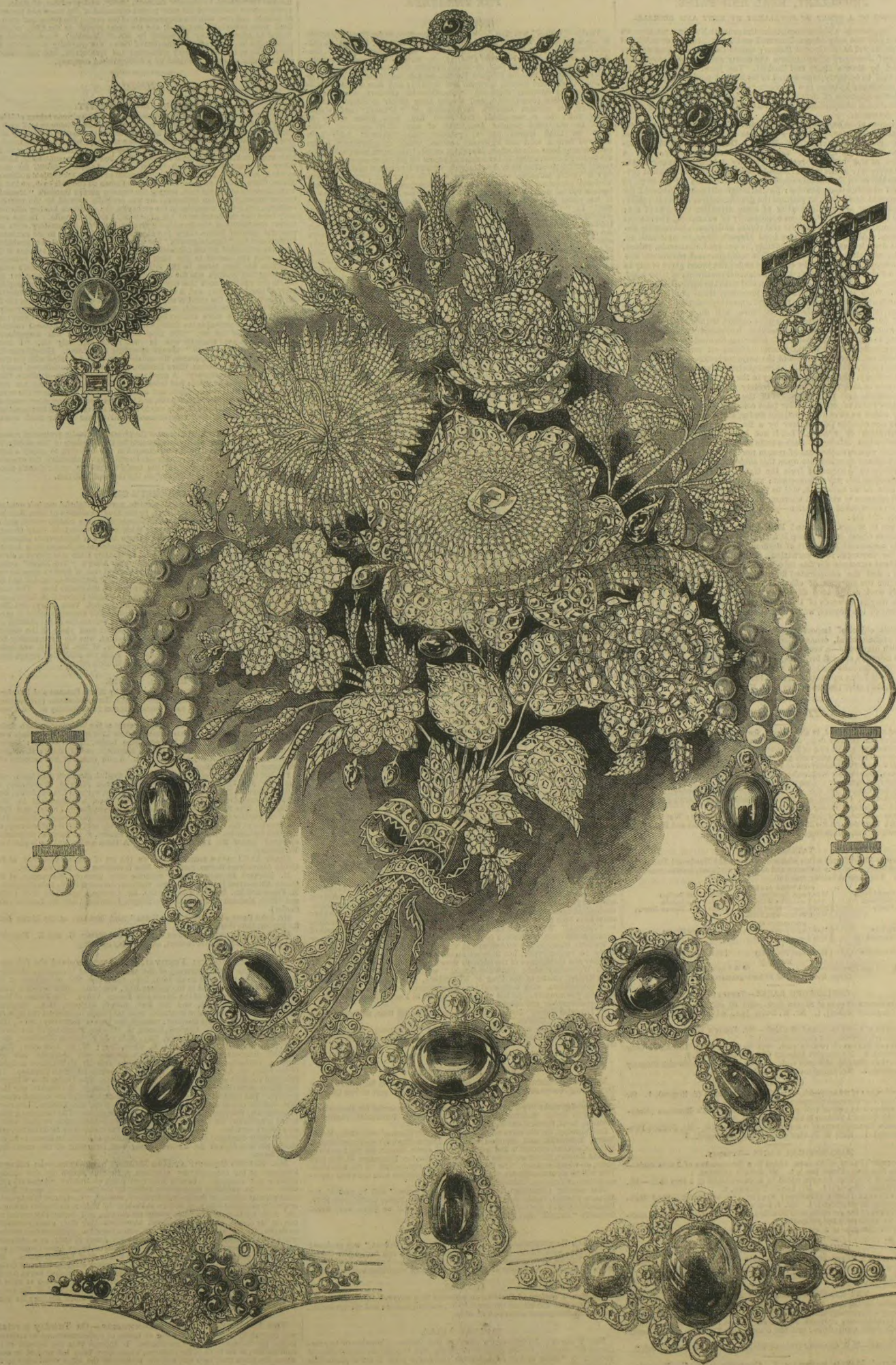
The composition of this picture is admirable; the troubled King is listening to the scribes, surrounded by luxurious accessories. It is night, and the stars glimmer in the firmament; but the moon is half obscured by a cloud, emblematic of the waning fortunes of Haman, who is ad-

vancing through the court; and the gibbet completes the narrative. The picture is, altogether, remarkably well painted.

DUMAS AND DAGUERRE.—In 1827, M. Dumas was lecturing in the Theatre of the Sorbonne, on chemistry. At the close of his lecture a lady came up to him and said, "Monsieur Dumas, as a man of science, I have a question of no small moment to me to ask you. I am the wife of Daguerre, the painter; for some time he has let the idea seize upon him that he can fix the images of the camera do you think it possible? He is always at the thought: he can't sleep at night for it; I am afraid he is out of his mind; do you, as a man of science, think it can ever be done, or is he mad?" "In the present state of knowledge," said Dumas, "it cannot be done; but I cannot say it will always remain impossible, nor set the man down as mad who seeks to do it." This was twelve years before Daguerre worked his idea out, and fixed the images; but many a man, so haunted by a possibility, has been tormented in a madhouse. This has been related within the last few days by Dumas.



EXHIBITION OF THE ROYAL ACADEMY.—THE CHRONICLES READ TO AHAUERSUS THE KING.—PAINTED BY H. O'NEIL.



JEWELLERY, REAL AND FALSE.

APPROPOS OF A GROUP OF JEWELLERY BY HUNT AND ROSKELL.

In the Supplement which accompanies the present Number, we give an engraving of the magnificent Diamond and Ruby Stomacher exhibited by Messrs. Morel in the Crystal Palace; and in the present sheet we give a Group of Jewellery selected from the costly and elegant assortment exhibited by Messrs. Hunt and Roskell. The jewel trade of England may be said to be fairly represented in its highest perfection in the specimens comprised in these two engravings, which, for gorgeous and substantial magnificence, and for artistic arrangement, may fearlessly challenge comparison with anything of the kind from any other part of the world.

We have elsewhere described Messrs. Morel's bouquet, and we shall presently very briefly enumerate the principal features in the group presented by Messrs. Hunt and Roskell, observing that, in cases of this kind, words can give but a faint idea of the brilliant reality, a reality which, to many in the humble every-day walks of life, must be totally inconceivable until presented to the mind by absolute ocular proof. And let us go over, at least, and examine these bangles; for, although ultimately intended for mere personal decoration, or perhaps the gratification of personal vanity, these specimens are really worthy of some attention as works of art, and it is seldom that we have an opportunity of seeing such favourable productions in the material and artistic arrangement, and in the execution. All that glitters at a Lord Mayor's Show, or civic ball, or in the crowded saloons of the nobility, is not gold, diamonds, rubies, emeralds, sapphires, &c., but very often unadorned pincheek and paste; whereas, in these works exhibited under the broad glare of day in the Glass Palace, all is reality; all the choicest specimens of their kind, all fashioned in the most exquisite taste, and with the perfect workmanship and standards of excellence in the mind's memory—dazzling standards bright as truth—which, if they do no more, will do good in putting many of our wives and daughters out of conceit with the tawdry trumpery in which they have sometimes weakly bedazzled themselves, and suggesting to them the propriety of adorning themselves after a purer and more genuine fashion for the future. *Mrs. Morel's* corset and false hair is but only in the cases of the perjured testimony in court, and the forged paper, but even in the unreal pretensions of a piece of make-believe jewellery. The injury to society in the one case, as in the other, is not the same in magnitude; but still society is injured, is insulted by such mockeries, and the self-respect of the wearer is undermined also, by the mere habit of sailing under false colours, to say nothing of the necessity which he or she is sometimes under, and which is sometimes liable to, of having to account for the value of a false hair, or some mean manoeuvre of pretension or evasion. Let it not be said that we are unduly sententious when talking of such a trifle as a diamond ornament; we submit that we are neither out of reason nor out of season in the few remarks we have been led into upon this subject. The moral and intellectual results to be expected from the Grand Industrial Exposition of 1851 are neither few nor unimportant, and, with the perfection of virtue, and false schemes of external adornment, and the adoption of simpler and juster principles of decoration—principles based upon a recognition of the beauty of truth.

To return to Messrs. Hunt and Roskell's Jewels. The principal and all-attractive object in the group is a magnificent diamond bouquet, exhibited as a specimen of the art of design and setting. The flowers, composed of the amethyst, rose, carnation, &c., are modelled from nature. This brilliant structure divides into seven different sprigs, each perfect in design; and the complicated flowers, by mechanical contrivances, separate for the purpose of effectual cleaning. In the production of this costly work nearly 6000 diamonds have been employed, the largest of which weighs upwards of 10 carats, whilst some of the smallest, in the stems of the flowers, would not exceed the thousandth part of a carat.

The next object of importance is an ornament for the head, composed of branch coral, ornamented by leaves of enamel and gold, enriched with diamonds—a very elegant production, of chaste effect.

At the sides are several brooches, bracelets, and other ornaments, enriched with diamonds and other precious stones; not the least curious amongst them being some specimens of ear-rings in emeralds, diamonds, carbuncles, &c., after the sculptures from Nineveh.

NATIONAL SPORTS.

The most aristocratic, and, in all respects, the best race meeting of the year, will commence on Tuesday next, and terminate on Friday, each day having a prominent feature in some rich or very betting event, and the *ensemble* being remarkable for excellence and variety. Those who wish to see racing in perfection will do well to peruse one of the specials from London-bridge. There will be a small race in the West, at Downham Park, and one on the same day at Kewford, formerly a place of some note.

The cricket fixtures for the week stand as follows:—Monday, at Lord's, Brighton, Sheffield, Fockham, and Taunton; Wednesday, at Lord's, Thursday, Lord's and Chesham; Friday, at Lord's, and Saturday, at Lord's. *Boxing*—Monday, at Southwark; Tuesday, at Wapping; Wednesday, at Weymouth; Thursday, on the Hamper; Friday, Doggett's Coat and Badge, and the St. George's Yacht Club Regatta at Dublin.

TATTERSALLS.

Thursday—The only move this afternoon was on the Goodwood Stakes, for which Backiller, no other a favourite and so rarely a winner, became second in command. The general betting was dull.

GOODWOOD STAKES.		
10 to 1 agst Grand Duke	10 to 1 agst	10 to 1 agst
8 to 1 agst Backiller	10 to 1 agst	10 to 1 agst
9 to 1 agst Presto	10 to 1 agst	10 to 1 agst
GOODWOOD CUP.		
6 to 1 agst Caribbo	11 to 1 agst	15 to 1 agst
6 to 1 agst Nancy (3)	12 to 1 agst	15 to 1 agst
T. Y. K. STAKE.		
2 to 1 agst Emerald	25 to 1 agst	15 to 1 agst
2 to 1 agst Emerald	25 to 1 agst	15 to 1 agst
Glasgow is struck out of all her engagements.		

CHELMSFORD RACES—THURSDAY.

The *Chelmsford Stakes* of 10 sows each, with 50 added—Mr. C. de Cane, Jan., and Simplicity (Sabin), 1. Mr. W. Davis, Jan., and Joe o' Sot (Hornaby), Jan., 2.
Sweepstakes of 5 sows each, and 50 added—Mr. Foster's Firebolt (Charlton), 1. Mr. Messer's Grasshopper (Bartholomew), 2.
The Haystack Stakes of 10 sows each, and 50 added—Mr. Drinkall's Grey Tommy (Ford), 1. Mr. Morris's Fidgety Girl (Bartholomew), 2.
The Revival Stakes of 5 sows each, and 50 added—Mr. Morris's Fidgety Girl (Atherton), 1. Mr. Johnston's Althea (Barnes), 2.
WEDNESDAY.
The City Stakes of 10 sows each.—Mr. Barrow's Abdallah (S. Rogers), 1. Sir T. Tyrrell and The Actress (Hornaby), 2.
HER MAJESTY'S PLATE of 100 guineas.—Capt. Haworth's Baroness (Simpson), 1. Mr. Taylor's Michael Brunton (Hackett), 2.
THE MARK'S HALL STAKES of 5 sows each, and 25 added—Mr. Foster's Firebolt (Charlton), 1. Lord Low's Fowling's Fob (Hackett), 2.
THE MARLBOROUGH RACES—THURSDAY.
THE MEMBERS' PLATE of 25 sows, and 50 added—A Sweepstakes of 5 sows each.—Mr. Land's Nightingale (Trenan), 1. Mr. Jones's Ambrose, 2.
THE LADIES' PLATE of 25 sows, and 50 added—A Sweepstakes of 5 sows each.—Mr. Waring's Gloom (Preston), 1. Mr. Jones's Ambrose, 2.
THE SAVANNAH FOREST (HANDICAP) STAKES of 10 sows each.—Sir J. Hawley's Beechamhall (Marden), 1. Mr. J. Day's Agis, 2.
SWEETSTAKES of 10 sows each, with 25 added.—Sir J. Hawley's Pluck (Hawley), 1. Mr. Gulliver's Lady (Hawley), 2.
THE TOWN STAKES of 5 sows each, and 25 added—Arlotte (Barnes), 1. Nightingale, 2. Misses and Mrs. Jones, 3.

GUILDFORD RACES—WEDNESDAY.

HER MAJESTY'S PLATE of 100 guineas.—Mr. Farrer's h.c. by Cardinal Puff, out of Peggy (Gosler), 1. Mr. J. S. Douglas's Don Pedro (Abraham), 2. *MARSHES* of 10 sows.—Mr. W. Taylor's Princess (Gosler), 1. Mr. White's Miss Frimley (Owner), 2.
THE LEANDER CLUB COAT AND BADGE.
 The contest for the coat, badge, and frock, presented by the Leander Club to watermen's apprentices who were in this and next year, came off on Tuesday evening, and was a very interesting race. The race was in three heats, with eight competitors, and the course from Putney to Hammermill-bridge.
 GRAND HEAT.—E. J. Chandler (red and white), 1. H. J. T. Bell (green), 2.

SCULLERS' MATCH BETWEEN T. COOMES AND G. MALVIN.—These young men—watermen's apprentices—were on Monday evening, for 25 a side, from Putney-bridge to the Ship at Mortlake. Malvin was a slight, fast, but only outwitted after a few minutes, as he was outwitted by the good style of the Star and Gulliver. From this point Coomes increased at every stroke, and won easily by a great distance.

THE THEATRES.

HER MAJESTY'S.

Verdi's "Ernani" was first produced in this country, under Costa's direction, in the season 1845, and was sustained by Madame Rita Bori, Moriani, Bellotti, and Fornasari. In 1846 it was done under Ballo's direction by Madame Fieschi, Castiglioni, Benelli, and Fornasari. In 1847, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1848, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1849, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1850, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1851, it was performed on Saturday night by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1852, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1853, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1854, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1855, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1856, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1857, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1858, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1859, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1860, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1861, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1862, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1863, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1864, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1865, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1866, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1867, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1868, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1869, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1870, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1871, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1872, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1873, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1874, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1875, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1876, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1877, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1878, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1879, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1880, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1881, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1882, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1883, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1884, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1885, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1886, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1887, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1888, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1889, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1890, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1891, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1892, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1893, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1894, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1895, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1896, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1897, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1898, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1899, by Madame Castellan, Fraschini, Benelli, and Fornasari. In 1900, by Madame Castellan, Fraschini, Benelli, and Fornasari.

In character in which Mlle. Sofia Cravelli has yet appeared, she has been heard so advantageously as in *Ernani*, the part that first attracted the notice of the public. Her style is as thoroughgoing melodrama as that in the opera of *Julius*. Verdi's works require singers of great physical endurance; it is of little importance whether they have mastered the correct divisions of the scale, so long as they can scream and hold on the upper notes in the incessant and rapid declamatory style, which Verdi's works possess. *Ernani* suits the voice and method of Miss Reeves, who vigorously competed with Mlle. Cravelli whenever their organs came in contact. The music of *Don Carlos* is undoubtedly high for Clotilde; but she acquitted herself artistically. Scarpini has not yet appeared for the part of *Silva*.

On Tuesday night the unwearied activity of the management was again displayed, by the production of the seventh novelty, and twentieth opera of the season. The new work is *Ernani*, a three-act opera, by Verdi; on the 16th of July, 1845, originally brought out on the 16th of May last, at the Grand Opera House in Paris, having been expressly composed for Mlle. Albani, with whom were associated Mlle. Nau, Mlle. Dameron, Mlle. Amyes and Mery. It was given some dozen times up to the period of Mlle. Albani's departure. The cast in this production was:—*Ernani*, Mlle. Albani; *Don Carlos*, Mlle. Nau (her first appearance at Her Majesty's Theatre) in their original characters of *Ernani* and *Gemma*, Mlle. Fieschi as the *Princess Don Carlos*, *Calisto* as *Rudolph* (lover of *Gemma*), *Mercurio* as the rival *Marquis Butira*, and *Sigior Bello* as the *Prince Don Carlos*. The music is of a very high order of the dramatic and musical situations would be a very useless waste of space, as by no possibility can the virtual failure of Tuesday's representation be reversed. It is impossible to disguise the fact—a more worthless drama has scarcely appeared in the theatre since the first production of *Ernani*. The first two acts were indescribably wearisome, and the third act was equally as tiresome, but was relieved by a Chinese *pas*, enacted after some opposition, and by a rondo finale of Mlle. Albani, on whom the entire attraction of the work is made to depend. The more beautiful voice (in the part of a rondo, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the music of Mlle. Albani, a woman who had a *l'air* of an early life with *Prince Don Carlos*, has been carried off by corsairs, and returns to Italy to find her child, *Gemma*, brought up as the *Princess's* niece, and affianced to the *Marquis Butira*, whilst she loves *Rudolph*; and who, by discovering *Ernani*, and *Sigior Bello*, as the *Prince Don Carlos*, who he had just discovered, off the match and secure the union of her child, *Gemma*, with *Rudolph* could not suffice to give interest and vitality to the absurd and repulsive incidents so monotonously and so miserably set forth by the composer. It would appear as if *Ernani* must have been the last stage of decay when he had just discovered, in the



GRAND MASONIC BANQUET, AT RUOBY, TO GENERAL SIR CHARLES NAPIER, G.C.B.—DRINKING THE GENERAL'S HEALTH.—(SEE PRECEDING PAGE.)

fortunes may be, the recollection of this day will make me always feel that the years I devoted to the service of the British navy were the best spent part of my life." Mr. O'Byrne then thanked those gallant officers

who, with the late Sir Charles Malcolm, formed a committee to recommend to the service, by the influence of their names and example, the meritorious volume. To Captain James Scott, who acted as secretary,

and to Messrs. Stilwell, the treasurers, Mr. O'Byrne returned his grateful acknowledgments.

At the conclusion of his address, Mr. O'Byrne was loudly cheered, and received the hearty congratulations of his friends.

Captain W. H. Smith moved that the thanks of the meeting be given to their gallant chairman, and took that occasion to state that the "Naval Biography" was a peculiar honour to the navy, inasmuch as it was the work of a landsman. It was surprising that so much correct information should be gathered by a landsman, and not a very old one either. (Hear, hear.)

The gallant Admiral having briefly returned thanks, the meeting separated.



THE SPANISH DANCERS.—(SEE PRECEDING PAGE.)



PLATE PRESENTED TO MR. W. O'BRYNE, AUTHOR OF THE "NAVAL BIOGRAPHICAL DICTIONARY."

The testimonial is a handsome silver candelabrum, by Dobson, of Piccadilly, silversmith to the Queen. It bears the following inscription:—

Presented,
With the sum of Four Hundred Guinea, to
WILLIAM RICHARD O'BRYNE, Esq.,
Author of
"The Naval Biography."

By more than Nine Hundred Naval Officers, who, with the First Lord of the Admiralty, have recorded their names, in token of the high estimation in which that work is held.



THE EGYPTIAN FLEET IN THE HARBOUR OF ALEXANDRIA.



THE LATE M. DAGUERRE.—FROM A DAGUERRETYPE BY CLAUDET.—(SEE NEXT PAGE.)

THE EGYPTIAN FLEET.

Alexandria, July 6.

The harbour of Alexandria presents just now rather a formidable appearance, for, in addition to frowning batteries, mounting several hundred guns, many of which point towards the only safe passage for large vessels through the dangerous reefs of sunken rocks which stretch across the mouth of the harbour, the Egyptian fleet, having lately undergone a refit, is seen drawn up in the centre of the anchorage, and consists of five line-of-battle ships and six frigates and corvettes, besides a few steamers. A Turkish steam-frigate, the Peninsular steamer *Ganges*, a Tunisian brig of war, and an Austrian Lloyd's steamer, add to the interest of the scene.

We are not, however, admirers of war, and hope the Egyptian fleet may never be required to test its present capabilities; and we are quite willing to remember the bravery of Egyptian troops and sailors in Mehemet Ali's lifetime. We have much confidence in the growing sense of nations, and trust any little differences between the Porte and the present Pacha of Egypt may shortly be amicably adjusted.

The British war-steamer *Grouler* arrived here some days since from Constantinople, with Sir Stratford Canning's secretary and despatches.

The Peninsular and Orienta steamer *Ganges* arrived off the bar at sun-set on the 3d, but was obliged to lay to for the night, it being too late for the Arab pilot to take the vessel past the reefs; however, she came in early next morning, the 4th, and anchored at 5.30. She had prevailing head winds during the passage out from England.

The mail-steamer *Oriental* arrived at Suez on the 2d of July, with about 80 passengers and the India and China mails.

OBITUARY OF EMINENT PERSONS RECENTLY DECEASED

DR. LINGARD.

THE Rev. John Lingard, D.D., one of the ablest historians which this or any modern country has produced, was a native of Winchester: he was born in 1769—a year of genius—the natal year of Napoleon, Sir Walter Scott, and Wellington. The University of Down was the place of Lingard's education, and he resided there in a remarkable and troublous time, the breaking out of the first great French Revolution, and not without some danger to himself, as would appear from the following anecdote, which he was wont to narrate. On one occasion, when the dissatisfaction of the populace had risen to such a degree that the military were under arms in the street, the young Lingard was looking out, when he observed an orderly ride rapidly up to the commanding officer, and in a few moments every trooper vaulted into his saddle. Shortly after came a counter order. The authority of the "sovereign people" was declared, and a Mons. De Baiz, who had rendered himself obnoxious, was hurried, amidst yells and execrations, *à la lanterne*. The student knew this gentleman, and penetrated the crowd to inquire the cause of his summary punishment; when his dress attracting attention, he heard the cry of "*La Calotte!*" and presently "*Le Caloteau à la lanterne!*" He took to his heels, darted down a narrow lane, and, thanks to his fleetness of foot, our eminent historian escaped. On another occasion he was compelled to sing the "*Ca ira*" with a bayonet at his breast.

After his ordination to the Roman Catholic priesthood, and previous to his appointment to Hornby, Dr. Lingard held a professorship at, and was vice-principal of, the College of St. Othbert, Ushaw, Durham. The Rev. gentleman was an unknown and retiring priest at Newcastle-on-Tyne, when, in 1806, he gave from the local press of that town his "*History of the Anglo-Saxon Church*"—a work



THE LATE REV. JOHN LINGARD, D.D.

that was the first and most efficient effort to attract popular attention towards the ecclesiastical glories of our Saxon forefathers, which are now familiar objects of study and speculation. Of all books, this is the one where may be obtained the greatest insight into the national mind and ways of thought of the Christian Anglo-Saxons. This production was but the pilot sent forth to test the current of public taste; finding that an impartial and liberal-minded priest, without a compromise of any principle, could count on a cordial popularity, the author boldly conceived the design of his "*History of England*," of which, the first volume appeared in 1819, and, in procuring materials for which, he visited the Vatican Library with various and laborious research, and had the Stuart records in Rome open to his inspection.

On the merits of that history it is now almost superfluous to dilate. More than thirty years of unceasing popularity and unceasing sale have stamped its fame and its worth. Superior to all our other historical productions in its unerring regard to correctness of statement and reverence to authority, the work of Dr. Lingard nearly equals in diction the admirable narrative style of that of his great predecessor Hume—a style easily more suited to his clerical writing than the eloquence of Macaulay, or even of Edward Gibbon. Dr. Lingard is allowed by all parties to have displayed throughout his book much and singular impartiality, and to have generally verified what he says in his preface in the following words:—"It has been my constant endeavour to separate myself as much as possible from every party, to stand, as it were, aloof, the unconcerned spectator of the passing events, and to record them fairly in those pages, as they came in review before my eyes. That they should always appear to others in the same light in which they appeared to me, I cannot expect; but, before the reader accuses me of prejudice, let him be assured that he is free from prejudice himself." The rest of Dr. Lingard's useful and unobtrusive career may be briefly told. The repeated new editions of his "*History of England*," also, an English version of the four Gospels, and various other learned publications in pamphlet form, consumed the time unoccupied by religious duty or by converse with the neighbours and friends who continually courted the charms of his society.

For the last forty years of his life, Dr. Lingard held the small and retired preferment belonging to the Roman Catholic Church in the village of Hornby, and here the historian resided, near to Hornby Castle, the seat of his attached and constant friend, Fudsey Dawson, Esq.—This may be noticed in the accompanying sketch: it owes its first erection to Sir Edward Stanley, a hero of Flodden Field, and its recent beautiful restoration to the taste of Mr. Dawson, its present owner, who was High Sheriff of Lancashire in 1845. After a long illness, Dr. Lingard closed his mortal career at his home at Hornby on the 17th Inst., at the advanced age of 81. He remains, pursuant to his own



BETHAN SPA, NORWOOD.—THE BENHEIM FREE DISPENSARY FETE.—(SEE NEXT PAGE.)

On Monday a party of female emigrants, thirty-six in number, being the eighteenth consignment under the auspices of the Female Emigration Society, left London by the Blackwall Railway, to embark on board the *Northumberland*, lying off Gravesend. Their destination is Port Phillip, to which colony no other parties have been despatched, of whom very favourable accounts have been received. The applications lately for the means to emigrate have considerably decreased—a result owing, it is said, to the generally increased facilities for finding employment and the payment of better wages.

Lord Darnley will succeed to the vacancy in the representative borough of Ireland, caused by the decease of that most upright and consistent politician, Mr. John Cavanagh.

TUESDAY, JULY 22.

recorded as having taken place in former eclipses. Baily, in an account of the observed phenomena, furnished to the Astronomical Society, observes, "when

FRIDAY, JULY 18

BANKRUPTS.
R ACRES, 101, Peckridge, Hertfordshire, Lincolns. R MATTY, Paul's Wharf, Upper Thames-street, fancy-obj. paper manufacturers. H C FROST, Russell-street, E. and
Hampden-street, E. and W. London, book, penholders. W ARUN-CLIK, 11, Palace-gate, Tottenham, ribbon-manufacturers. W BUCHANAN, Gerard-street, Soho, picture dealer. W H BARKET, Gloucester, miller. J WELCH, Nantwich, Cheshire, coach-builder. G LOWERS, woolen-draper, Manchester.

SCOTCH REQUISITIONS.
M ROSS, Mulrick, Ayrshire, brick and the maker. W J LAMAK, merchant. JACKSON and CO, Glasgow, commission agents.



MAP OF EUROPE, SHOWING THE COURSE OF THE SHADOW IN THE TOTAL ECLIPSE OF THE SUN, JULY 28, 1851.

SUCCESSIVE APPEARANCES OF THE SUN DURING HIS ECLIPSE, ON JULY 28, 1851, PRECEDING THE GREATEST PHASE, AS SEEN THROUGH A TELESCOPE WHICH DOES NOT INVERT, AT



7h. 18m. P.M. 7h. 27m. P.M. 7h. 30m. P.M. 7h. 31m. P.M. 7h. 4m. P.M.

SUCCESSIVE APPEARANCES OF THE SUN DURING HIS ECLIPSE, ON JULY 28, 1851, AFTER THE GREATEST PHASE, AS SEEN THROUGH A TELESCOPE WHICH DOES NOT INVERT, AT



7h. 37m. P.M. 7h. 38m. P.M. 7h. 44m. P.M. 7h. 54m. P.M. 8h. 5m. P.M.

the cusps of the Sun were about 40° asunder, a row of lucid points, like a string of bright beads, irregular in size and distance from each other, suddenly formed round that part of the circumference of the Moon that was about to enter, or which might be considered as having just entered, on the Sun's disc. Its forma-

tion, indeed, was so rapid, that it presented the appearance of having been caused by the ignition of a fine train of gunpowder. (See Fig. 1.) My surprise, however, was great on finding that these luminous parts, as well as the dark intervening spaces, increased in magnitude, some of the contiguous ones appearing to run into each other like drops of water; for, the rapidity of the change was so great, and the singularity of the appearance so fascinating and attractive, that I was so much occupied by the momentary appearance, and lost in the contemplation of the scene. (See Fig. 2.) Finally, as the Moon pursued her course, these dark intervening spaces were stretched out into long, black, thick, parallel lines. (See Fig. 3.) Fig. 4 represents a continuation of the same phenomenon; when, all at once, the long threads suddenly broke and wholly disappeared, leaving the circumferences of the Sun and Moon in those points, as in the rest, comparatively smooth and circular; and the Moon perceptibly advanced on the face of the Sun. After the formation of the annulus thus described, the Moon preserved its usual circular outline during its progress across the Sun's disc, till its opposite limb again approached the border of the Sun, and the annulus was about to be dissolved; when (all at once), the limb of the Moon being at some distance from the edge of the Sun, a number of long, black, thick parallel lines, exactly similar in appearance to the former ones above mentioned, suddenly darted forward from the Moon and joined the two limbs as before; and the same phenomena were thus repeated, but in an inverse order.

On July 8th, 1842, a total Eclipse of the Sun took place, and Mr. Baily went to Pavia, in Italy, to observe it. In an account of the phenomenon from him to the Royal Astronomical Society, Mr. Baily remarks: "I at first looked out very narrowly for the black lines which were seen in the annular eclipse of 1836, as they would probably precede the string of beads. These lines, however, did not make their appearance; or, at least, they were not seen by me. But the beads were distinctly visible; and on their first appearance I had noted down on paper the time of my chronometer, and was in the act of counting the seconds in order to ascertain the time of their duration, when I was astonished by a tremendous burst of applause from the streets below, and at the same moment was electrified by the sight of one of the most brilliant and splendid phenomena that can be imagined; for, at that instant, the dark body of the Moon was suddenly surrounded with a corona, or kind of bright glory, smaller in shape and magnitude than that which painters draw round the heads of saints, and which by the French is designated an *aurole*."

Pavia contains many thousand inhabitants, the major part of whom were, at this early hour, walking about the streets and squares, or looking out of windows, in order to witness the long talked of phenomenon; and when the total obscuration took place, which was instantaneous, there was a universal shout from every observer, which made the welkin ring; and for the moment drew my attention from the object with which I was immediately occupied. (See Figures.) I

APPEARANCE OF THE SUN AT THE ANNULAR ECLIPSE OF 1836, MAY 15, AS SEEN BY MR. F. BAILY.

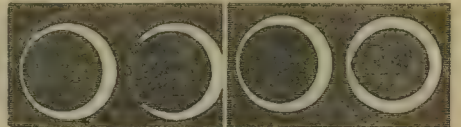


Fig. 1. Fig. 2. Fig. 3. Fig. 4. had indeed anticipated the appearance of a luminous circle round the Moon during the time of total obscuration; but I did not expect, from any of the accounts of preceding eclipses that I had read, to witness so magnificent an exhibition as that which took place." Mr. Baily then proceeds to say that the most remarkable circumstance attending this phenomenon was the appearance of three large protuberances, apparently emanating from the circumference of the Moon (see Figure); and he remarks that his attention was so constantly taken up by the remarkable and unexpected appearances, that he omitted to watch for the reappearance of the beads, and, therefore, he could not add his testimony to the recurrence of that phenomenon.

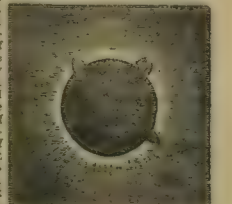
APPEARANCE OF THE SUN AT THE TIME OF GREATEST OBSCURATION, AT 3h. 12m. P.M., ON JULY 28, 1851, AS SEEN THROUGH A TELESCOPE WHICH DOES NOT INVERT.



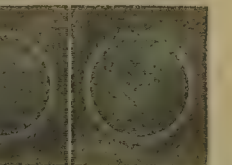
At London. At Edinburgh.

The Astronomer Royal, G. B. Airy, Esq., made a journey to Turin for the purpose of observing the Eclipse; and in his account of the phenomena, to the Royal Astronomical Society, he remarks that he saw nothing whatever of beads or other irregularity in either of the extinctions of the Sun's limb. But the appearance of the Moon can never be forgotten—it was like a black patch fixed in the sky, surrounded by a ring of faint light, whose breadth he estimated at $\frac{1}{8}$ th of the Moon's diameter. He then says, "I gazed earnestly at this remarkable ring, and I could not divest myself of the idea that it was produced by the sun's light shining past the Moon's body through a portion of our own atmosphere. I wish it to be understood clearly that I do not offer this as an explanation of the ring (indeed, considering the number of miles by which the Moon's limb overpassed the line drawn from the place of observation to the Sun's limb, I cannot now consider such an explanation feasible)." After a few other remarks on this ring, he proceeds: "I took off the dark glasses and carefully examined the Moon with the telescope. Her disc was distinctly visible as having independent light; and I think that it had been stronger light than I had seen the large tracts of different brightness on her disc. I could not, however, see the smallest inequality of light of the nature of broad dark tracts, or dark spot, or bright spot. While thus looking at the Moon, I saw, to my great surprise, some small red flames at the apparent bottom of the disc (the top as seen with the naked eye). The number of flames, as I have them impressed on my memory, and as I find them drawn on a small pencil sketch made a few minutes after their appearance, was three; their form was exactly that of saw-teeth, in the position proper for a circular saw turning round in the same direction as the hands of a watch turn." (See the figure, vol. of the *Memories of the Royal Astronomical Society*.) The preceding are copies of the drawings made by the Astronomer Royal.

APPEARANCE OF THE TOTAL ECLIPSE OF THE SUN ON JULY 8, 1842, AS SEEN AT PAVIA, IN ITALY, BY MR. F. BAILY.



APPEARANCE OF THE MOON AT THE MIDDLE OF THE ECLIPSE.



APPEARANCE OF THE MOON AFTER THE MIDDLE OF THE ECLIPSE.

APPEARANCE OF THE MOON AFTER THE MIDDLE OF THE ECLIPSE.



MARRIAGE OF LORD EDWARD FITZALAN HOWARD AND MISS TALBOT.—THE BRIDAL CAKE.

EXHIBITION SUPPLEMENT TO THE ILLUSTRATED LONDON NEWS

No. 505.—VOL. XIX.]

SATURDAY, JULY 26, 1851.

[Two Numbers, 1s.]

THE GREAT EXHIBITION.

THE ZOLLVEREIN.

Our readers are probably aware that the Zollverein (toll-union), which occupies a large part of the Crystal Palace, is not the name of any country known either to ancient or modern geography. It designates a union of several States of Germany under one common custom-house law,—a policy, not a country,—which brings under one series of fiscal regulations, concerning import and export duties, the subjects of several States of Germany having somewhat different laws and lying widely apart. It embraces Prussia, Saxony, Württemberg, Bavaria, Baden, Nassau, the two Hesses, and all the minor States of the centre of Germany, and contains altogether somewhere about 26,000,000 people. Hanover, Brunswick, Oldenburgh, Bremen, Lubeck, Mecklenburgh, on the north; Bohemia, Austria Proper and other German dominions of Austria, on the south, are not members of this Union. Prior to its being formed, the 37 States, large and small, into which Germany was divided, levied each its own duties and tolls on rivers and roads, and had its own custom-house officers to levy them. As the rule, no goods could be transmitted through any one of these States to another, or sent from one to another, without being subject to all the vexatious delay of a custom-house examination at the boundaries of every State. The actual facts were still worse, for many noblemen and cities levied, till a very recent period, private tolls; and at their "bars" all goods were liable to a similar examination. The annoyance of this system, to say nothing of the accompanying annoyance of passports, which still continues, was immense, and far exceeded anything of which our people, long united under one Government, and having amongst themselves internally a perfectly free communication, have ever practically had to form any conception of. To get rid of some of these vexations, the States above mentioned, under the influence

of Prussia, united themselves about twenty years ago into one body abolishing all intermediate tolls and custom duties, and levying only duties common to all, at the one extreme boundary of the united States, and dividing the revenue accruing among the different States composing the union, in proportion to their size, population, consumption, and previous revenue, &c. The States not in the Union, and the other German States, preserve their own revenue laws; and, so far as trade and customs duties are concerned, may be considered as foreigners. The readers will see, therefore, that the name Zollverein in the Exhibition is a mere political designation for a great part of Germany, separating it from Northern Germany on the one hand, and from the Austrian dominions on the other; and such products of the industry of the 26,000,000 people comprised in the Union as they are pleased to exhibit, it is now our intention to describe.

The department of the Zollverein is in the eastern part of the Crystal Palace, approximating towards the centre. It extends on both sides of the Nave into the galleries, as well as on the ground-floor; has Russia on the east and Austria on the west. Intermingled with it, however, is the space appropriated to Northern Germany, an arrangement justified by the geographical relations of the two, but at variance with the political designations, and the source of some confusion. In truth, disorder in arrangement, singularly enough for the methodical Germans, seems to us to characterise their part of the Exhibition. Although Württemberg, Saxony, and Bavaria have distinct exhibition rooms on the south side of the Nave, in which to display their cloths and shawls and stockings; in the Grand Centre Hall of the Zollverein on the north some of their most distinguished products, and the most distinguished products of the other states, are mingled with the products of Prussia, which disables us from forming a just appreciation of the industry of the separate people, or of the whole Zollverein. In the medley, we cannot compare and contrast what has

been done by the lively, vain, egotistical and royal Prussian with the productions of the more solid and somewhat duller electoral or grand ducal Hessian; nor can we conveniently distinguish between the industry which is rooted on the Iser and that which flourishes on the Elbe or the Rhine. The arrangement which deprives the several people of their customary distinctions, to unite the exhibition of their industry under one political name, does not seem to us to be a happy one. If it could give them a political unity, and make them one state, as they are one people in language and literature, getting rid of the expense of many sovereigns, many courts, and many separate functionaries, we might hail it with satisfaction; but in the Exhibition it only loses them in Prussia, and drowns all their peculiarities in one muddy political stream.

The general remarks which follow apply in a great measure to the industry of all the Germans, not excluding even the Austrians, though we have described separately the Austrian part of the Exhibition; and we must, therefore, make our readers fully aware of the number of people to whom they apply. The Zollverein contains about 26,000,000; Northern Germany, about 4,000,000; and Austrian Germany, about 7,000,000. The country they inhabit extends from the Baltic to the Iser and the Rhine, from the German Ocean to the Carpathian Alps, and embraces a great variety of soil-surface and climate. It is rich in minerals and raw products, and is traversed by numerous large rivers. It is the best and principal part of central Europe. For such a country and such a people, the exhibition of their industry strikes us as comparatively poor and comparatively uniform. There is a sameness in it throughout, not met with in any other part of the Exhibition of equal pretensions.

In one great natural quality Germany is deficient, and the want of it has been much aggravated, instead of being relieved, by the policy of its governments. It has comparatively a small extent of seacoast. Denmark and Holland shut it out from a direct connexion and communication with two parts of the ocean. It has had, therefore, in



THE ZOLLVEREIN COURT.—FROM A DAGUERRETYPE BY BEARD.

up to the year 1839, there was no satisfactory method in use for manufacturing durable mosaic pavements at a moderate cost, and Mr. Singer first took out a patent for a mode of forming little cubes for mosaic-work, of ordinary porcelain which, being arranged in terms, was afterwards cemented at the back. A pavement of this kind is exhibited, (Class 27, No. 88), in which the tesserae have been made in the usual way of porcelain clay, baked in separate cubes before being laid down. In 1840, Mr. Prosser, of Birmingham, discovered that if the

material of porcelain (a mixture of fine clay with flint) were reduced to a dry powder, and in that state subjected to enormous pressure between steel dies, the powder is squeezed into about one-fourth of its bulk, and compressed into a compact solid substance of extraordinary hardness and density, much less porous and much harder than common porcelain after baking. Cubes made in this manner, of red, blue, and white clays, and baked in the usual way, but either glazed or not, are laid down on a flat surface and cemented into convenient shapes and patterns with fine Roman cement, worked in to fill the crevices between the blocks. The effect of this ingenious manufacture is singularly beautiful, and the durability perfect. Patterns are easily and accurately obtained, and the various intricate intersections of grotesque and arabesque outlines readily executed.

The material of which Minton's mosaic tiles are made is essentially a porcelain clay, and of such substance there is a large and most interesting group to be found in Class I, No. 93 to 119; besides other displays of similar material from China and elsewhere. The China clays consist of the argillaceous or clayey part of decomposed granite, collected and sifted, either naturally or artificially, by the agency of water; but they include a larger percentage of silica, which is part of their value and is not to be found in clays about in the neighbourhood of the granite bosses of Cornwall and Devonshire, and have hitherto been chiefly worked at and near St. Austell, where the supply is too large to be easily reduced. Recently, however, works have been erected on the southern extremity of Dartmoor; and of the material here obtained, and the porcelain made from it, examples are shown by Mr. Phillips (Class I, No. 101).

A considerable quantity of red, white, and blue clays, also obtained from Dorsetshire; samples of these are shown by Messrs. Pike (Class I, No. 102) and Messrs. Whiteway, Watts, and Co. (Class I, No. 90). In the manufacture of the finer kinds of porcelain, great care is taken in mixing the finest and purest clays with a due proportion of silica and other material, obtained partly from burnt and pounded flints, and partly from an exceedingly pure felspar known as china stone. Of the latter some extremely beautiful specimens are shown by Mr. Phillips (Class I, No. 101). After examination, and are already in considerable use. Varieties of felspar from America have been occasionally introduced into the potteries, notwithstanding the cost of transport; and it is understood, that much of the beauty of the parian ware is due to the admixture of this ingredient.

Fire-clay is another substance of great importance, and of which many specimens, both raw and in various stages of manufacture, have been sent for exhibition.

The Stourbridge clay, of which Messrs. King and Co. (Class I, No. 91) and Mr. Cowen (Class 27, No. 112) send good samples, together with various objects made therefrom, is one of the best known and most highly valued in this country. It occurs beneath the coal in the coal measure of Stourbridge (Worcestershire); and a similar, or nearly similar, material is very common, in like positions, in other parts of the country. Clay of this kind requires to be burnt in the highest degree, and the result is not to be generally deeply-coloured by carbon, and most kinds exhibit a peculiar fracture, owing apparently to the condition of the clay. The articles made of it are gas retorts, fire-bricks, smelting pots for steel, brass, &c., where long exposure to intense heat is required. In the case of gas-making, the use of clay is now altogether superseding the iron retorts long employed, and the advantage is considerable in all respects; as, in this process, it is in the highest degree refractory, and the material and workmanship should be of great excellence, while the cost is not so excessive. The manufacture of Messrs. Cowen is well known for the excellence of the goods of this kind supplied, and their cheapness and the reputation of the house are well sustained in the Exhibition. The form and texture of the gas retorts, and the perfect state in which they are presented by their exhibitors, are highly creditable. Several excellent articles made of this material are also shown by Messrs. King and Co. (Class I, No. 91) and Messrs. Whiteway, Watts, and Co. (Class I, No. 90). In France, although we may safely say that none of the clays of this kind are considered to have surpassed our own in material or workmanship.

Besides gas retorts and fire-bricks, we have also a good display of plumbago crucibles, or rather crucibles made of refractory clay, with which a large quantity of plumbago is mixed to render the whole sufficiently porous when used to allow of a small amount of expansion, and thus capable of resisting the most intense heat of a wind furnace. Mr. Ruel, of Holborn (Class I, No. 135) sends a fine specimen of this material, for which he has a great reputation; and some German makers have also forwarded specimens of their care in manufacturing remarkably large and beautiful plumbago crucibles, which have every appearance of being excellent. Kerpell (Wirttemberg, No. 38) and Coste (Belgium, No. 397), are, perhaps, the best-looking; but it is difficult to estimate their relative excellence without a more detailed examination.

While speaking of chemical apparatus, we must not neglect that of Messrs. S. Green and Co., of Lambeth (Class 27, No. 125), which is a model of ingenious and neat contrivances. A gigantic jar for acids, the largest, perhaps, ever made, and an angular worm of a still, which admits of access throughout for the purpose of cleaning, as well as an acid pump, are well worthy of close attention.

It is of course a common connexion with manufactures that they can profess to give any special interest to the various kinds of clay, and thus, to come back to the main object of this paper, we would advise the reader to study chiefly such series as that exhibited by Mr. Minton (Class I, No. 97), where the specimens all serve to illustrate processes; and that of Mr. Phillips and others, where the relation of clay and derived porcelain are very well shown. The former being the collection of a manufacturer, and chiefly illustrating the best processes of manufacture, while the latter, where the relation of the raw material, and the objects being therefore quite distinct, they may well be examined together.

Besides the clays already referred to, there are several other kinds adapted to different uses in the arts. Thus we have the common, but purer kinds of clay used in works of terra cotta, or partly burnt clay, of which there are numerous beautiful specimens in Class 27. A still purer, and much more plastic clay, is used for pipes, which are of a peculiar variety, containing a very large percentage of water (essential to its constitution, and not rendering the mass damp), is known as "faller's earth," and is much used in the clothing districts for preparing cloth, owing to its remarkable power of absorbing grease. Large quantities are obtained from near Reigate, in Surrey; and the various stages of preparation are shown by Mr. Cawley (Class I, No. 47), and Messrs. Gawthorpe and Hyman (Class I, No. 48).

SANDS are used for various purposes, and several kinds will be found exhibited in Class I. Among these the casting sands of Sir T. Wilson (49) and Mr. Collinson, of Mansfield (76), are remarkable for all those qualities that give value to the material. The purity of the sand, the evenness of its grain, and the consequent smoothness which it presents, are all favourable for moulding and receiving the metal. Such sands are not found everywhere, and where they do exist, at a high price. They are often deeply coloured with oxide or silicate of iron, but this is not considered a disadvantage.

White sand is used to a large extent in glass-making; and some of the best of this kind employed in London, Birmingham, &c., comes from near Aylesbury (Dr. Lee, 126), from the Isle of Wight (Claxton, 73, and Squire, 74), and from the Isle of Wight (Claxton, 73, and Squire, 74). Till lately, no sand from any English locality was delivered in nearly so pure a state as that obtained in Paris and other cities on the Continent; but there is little reason why this should be the case, and there is nothing in the finer and better of our sands that renders them in any way inapplicable for the best purposes of glass-making, provided due efforts are made to remove the small impurities that can be conveniently got rid of. The sand exhibited by Dr. Lee, of Hartwell, and already referred to, is the finest and purest of the kind we have seen, and is of considerable value. Together with the sand will be found some objects of glass, such as prisms and globes, manufactured of it, to show its quality. These give a good opportunity of noting the absence of colour when a great thickness of glass is looked through.

Besides these finer kinds of sand, and others used for special purposes in the arts, there are some from the Isle of Man and Cornwall complete series of the sands and sands of the district. The latter are worthy of note in illustrating the use of calcareous and other sand for vitreous manure. Many thousands of tons of these fine sands, which consist of little else than comminuted shells, and retain a certain proportion of animal matter, are annually carried from the south coast of Cornwall into the interior, for the purpose of enriching some of the poorer soils. (See House and Wiltley, Class I, No. 106.) Samples of another kind of Cornish manure obtained from fishes and dead animals, are also exhibited in Class I, at no great distance, by Mr. Gill, of Truro (Class I, No. 98), although they properly belong to another class.

Together with sands of the ordinary kind, we may take the finer kinds obtained generally from river silt, or elsewhere, under very peculiar circumstances, and used in the arts as polishing powder, under the name of Tripoli or rottenstone. Recent and very minute researches on the microscopic structure of the particles that give its peculiar value to this kind of substance have fully demonstrated that they are almost entirely the skeletons of infusorial animals living in infinite abundance in moist earth, and of such extremely small dimensions that millions would be required to form a cubic inch. Prepared Trent sand and Welsh rotten-stone are exhibited by Messrs. Plather and Haden (Class I, No. 80.)

Ochres form a group of earthy minerals, coloured by metallic oxides, or consisting chiefly of them, which are exhibited not only in England (Class I, No. 40 and 92), but in several other countries, of which we may mention Nova Scotia, Trinidad, Van Diemen's Land, and France. They are chiefly oxides of iron, and of red or yellow colour. Those sent by Messrs. Jenkins and Dear (Class I, No. 92) are in different conditions, as used in the arts, and are of very good quality. The ochres from Bristol, forming part of the very interesting and carefully selected series of Mr. Howard (Class I, No. 29), are also worthy of notice for their purity and depth of colour.

The earthy materials from which various kinds of cement are manufactured are represented in a few cases, but none of them are very remarkable. The Ipswich Museum committee have sent specimens of the mineral riches of their neighbourhood, including the well-known Harwich septaria, or stones from which Parker's and Roman cement is made; and from Greece we have some fine samples of Pozzuolana, much used in that country for building. Gypsum and septaria from various parts of the country (especially Derbyshire and Lincolnshire for the former, and many of the clay districts for the latter) are shown by Messrs. B. White and Sons (Class I, No. 138) and Messrs. Blyth and Jacobs, for the purpose of illustrating the finished manufactures which they exhibit. Both these substances require to be burnt and powdered before being used, and as in this state they cannot assume the solid form without a certain quantity of water which they absorb greedily with the emission of heat, they are capable of being used, under management, as hydraulic cements, setting or hardening under water.

It is already referred to the mineral manures obtained from the sea-coast of Cornwall, and their use in the cultivation of the soil. These are, however, other substances found in the earth admirably adapted to improve the soils required to grow corn crops repeatedly, supplying that peculiar element, phosphorus, which seems absolutely needed as an ingredient in the food of man. Such material is obtained from the bones of all kinds, but then rapidly disappears; and it is not long since the advance of the agricultural revolution to agriculture, has so clearly demonstrated, both the fact and the cause, as connected with the fertility of soils, that the subject of mineral manures is becoming daily more and more important. The recent discovery, on the east coast of England and elsewhere, of actual deposits of gravel, consisting of phosphate of lime, and capable, by a little chemical manipulation, of forming a most useful material to mix with the soil, has tended to bring the subject more prominently forward, and has naturally been considered in preparing for exhibition the mineral products of our country.

These concretions of phosphate of lime were, no doubt, originally derived from the remains of animals accumulated in various beds during the process of their deposit. They have hitherto been met with in two positions, one of these, namely, amongst the sands (upper green sand and gault) near Farnham, and the other, in the form of a series round the chalk hills of the south-east of England, they are apparently *in situ*, and are unquestionably accumulations modified, if not produced, long after the original formation of the rock in which they occur. In the other case they are found at the bottom of the upper beds of crag on the coast of Suffolk, and are manifestly accumulations of the pebbles once forming a sea beach, and derived from rocks of older date. Good examples of both these will be exhibited, both by Mr. Paine (No. 38) and Mr. Nesbit (No. 46), but chiefly by the former, as far as the Farnham beds are concerned. The Ipswich Museum committee (No. 35), show a good series of the Suffolk nodules. The percentage of phosphate of lime in these nodules varies from 30 or 40 up to 70 per cent., and is sometimes even higher in small heaps. They are converted into a soluble superphosphate of lime by the action of sulphuric acid, and in this state are available for agricultural purposes.

Among the subjects fitly considered under the head of earths must now be mentioned one which will, at first, be thought out of place—we mean that which is commonly called black lead, or plumbago, but which is, in fact, a form of carbon, only different in condition from the coals so abundantly distributed in our country. Black lead is by no means a rare substance in nature, but in the compact and peculiar form in which it is presented in its native state, it is very seldom met with. In Cumberland, which has not yielded any supply for many years. Others are obtained from Ceylon, Bohemia, Spain, and other places; and an admirable collection from all known localities of importance is exhibited by Mr. Brockendon (Class I, No. 69), who also shows some interesting processes by which the powder, otherwise almost useless, is rendered available for the fine and delicate work of the pen. The process is not the only exhibit of black leads, but the others chiefly exhibit the same process. The peculiar mode of preparation consists in producing an extremely powerful compression of the particles when in a state of minute division, and is thus described—The mineral in a state of impalpable powder is deprived of air under an exhausted receiver, and then condensed in a dry state, a mass weighing seven ounces being consolidated by two tons of pressure, and a form of lead is obtained, leaving it perfectly compact and solid; and from these blocks slices are cut, which are used in the manufacture of pencils from solid masses of black lead. The use of this process is so considerable that it has almost superseded the necessity for having the natural mineral in the rarer and more expensive form.

We have thus endeavoured to give the reader some idea of the general character of the Exhibition in the case of the earthy and mineral objects not very attractive, and for the most part not directly connected with the manufactures as are likely to attract notice. It is to be hoped that the really valuable and useful objects briefly alluded to will not be utterly neglected and lost sight of during the period of the Exhibition itself, surrounded as they are with more showy materials; and that when these more costly products shall be removed, the others may still remain, to be regarded by the mechanic and the workman, as well as to instruct those who are being educated for the arts. There is no employment to be connected with the arts. That some selection should be made and retained from the raw material of this and other countries, is, indeed, highly to be recommended, and we believe that her Majesty's Commissioners have already sanctioned an application to exhibitors, suggesting that it might be advisable to retain such objects as have no great intrinsic value, except as representing the actual condition of materials having a more or less extensive use in the arts. The collection of industrial objects thus formed, and the existence of a convenient place for their preservation, would tend greatly to advance the best interests of manufacture in this country.

MACHINES EXHIBITED BY SHARP BROTHERS AND CO.

The well-known firm of Sharp Brothers and Co. have contributed some good examples of lathes for turning the wheels of locomotive engines and other purposes: the first of these is called a Railway Wheel-turning Lathe, having two face plates each of 7 feet diameter, adapted for turning a pair either of locomotive or railway carriage wheels of that size, when fixed upon their axle or otherwise, without torsion. Two tires may be bored at the same time, or a wheel may be turned on one plate while the boring or boring of a second wheel is going on, being attached to the other face plate.

The extreme distance between the centres of this lathe is 9 feet 6 inches, so that axles and wheels of the broadest gauge may be turned in it. The advantages of this machine are, that the two tools employed have self-acting motions, whereby one man is enabled to accomplish more than twice the amount of work than could be accomplished by lathes of the ordinary construction.

The second machine to be noticed is a key-grooving or slotting machine, which is used for cutting the key-grooves in the boxes of railway and other wheels, up to any diameter not exceeding 7 feet; having also longitudinal, transverse, and circular self-acting motions, whereby it is particularly adapted for paring or shaping, internally or externally, crank-axes, crank-arms, connecting-rods, and other parts of locomotive, marine, or stationary engines.

The third is a planing machine, suitable for planing articles of metal not exceeding in size the following dimensions, viz. 4 feet long, 3 feet 5 inches wide, and 3 feet 3 inches high. In this machine the article to be planed is moved along by a traversing table, while the cutting tool is a fixture, being attached to a cross slide, and so arranged that the machine itself, having been once put into motion, causes the tool to cut either horizontally, vertically, or at any required angle, without the assistance of an attendant.

The horizontal shaping and planing machine we shall next describe. The peculiarity of this mechanical contrivance is that the tool has a variable motion of from one to six inches. The difference between this machine and the one last described is principally that of the tool moving while the article operated on is stationary. The tables are so arranged that horizontal and circular work is effected by self-acting movements of the machine, while irregular curves are planed by a motion requiring the attention and direction of the workman.

The fifth and last of the machines exhibited by Sharp Brothers and Co. is an improved Throfile or Spinning Machine, furnished with 96

spindles, which are arranged for cotton. The great difference between this machine and others of the same class is, that the spindles are driven by friction, instead of by bands. Thus, greater certainty is attained, and less power required; moreover, the flyer usually attached to such machines is dispensed with; thus, the spindles are driven at a much greater velocity, without injury to the machine. There are other advantages obtained by this mode of construction, which may be summed up in a few words:—One-fifth of the space usually occupied is saved; a much smaller quantity of oil in working the machine is required; and the alternation of weather and temperature have no injurious effect upon the machine which is thus worked by a more uniform amount of power.

ON THE GUTTA PERCHA CONTRIBUTIONS TO THE GREAT EXHIBITION.

It is not quite eight years since the substance called Gutta Percha was transmitted from Singapore to Mr. F. Whishaw, as secretary to the Society of Arts, for the purpose of subjecting it to a rigid examination, in order to ascertain whether it would be desirable to collect it in large quantities, which were easily obtainable in that island, so that as a new article of commerce it might, with little delay as possible, be introduced to this country. The samples sent to the Adelphi, by Dr. Montgomerie, were contained in a small deal box, and consisted, first, of the juice of gutta percha in a bottle; second, thin pieces of the substance, in appearance somewhat resembling leather; third, the gutta percha in its concrete state; and, lastly, lumps of the gutta percha formed by agglutinating the thin pieces together by means of hot water.

Chemists, manufacturers, and others were all anxious to obtain small pieces of the material, for the purpose of making experiments therewith. Among these applicants, Mr. Charles Hancock was foremost; and while the chemical committee of the Society were waiting for the reports of practical men on the subject, this enthusiastic gentleman having had permission to possess a very small piece of the substance, made himself so thoroughly master of the nature of gutta percha, that it was not very long before he took out patents for machinery suitable to the manufacture of articles for various useful purposes to which it has been applied.

In the meantime, however, the secretary of the Society of Arts had made a variety of experiments with this highly interesting substance; the result of which was, that, at one of their weekly meetings, he was enabled to repeat his experiments before a full meeting, and produced on that occasion a pipe and a lathe-band, and covered a lump of bottle with a thin coating of the substance, by immersing a lump of gutta percha in hot water, next rendering it quite hard by immersing it in cold water, and then removing the whole, and forming it again into a solid lump by dipping it once more in hot water and kneading it with the hands. Impressions of medals which had been produced by the same gutta percha were also shown before the meeting.

Two of the staple articles of the gutta percha manufacture—viz. a pipe and a lathe-band, as made by hand, previously to the introduction of machinery for that purpose—are exhibited by Mr. Whishaw on the western "wall space" of the Telegraph section, in the Middle Gallery North, and numbered 419, Class 10, in the Catalogue. Next to the raw material exhibited by Messrs. Bann and Co., No. 77, Class 23, the above-named samples of manufacture should be examined before the visitor looks at the numerous specimens of gutta percha articles manufactured by machinery.

Previously to noticing the various applications of gutta percha which are to be found in many parts of the Great International Exhibition, it may be as well to give our readers some notion of the nature of the tree from which this material is collected, and of its chemical composition. Singapore, which seems to be the only country at present known in which gutta percha can be obtained in large quantities; it is the concrete juice of a large forest tree of the same name. Its trunk is straight and lofty, and about three feet in diameter at its base; its branches are numerous, having ascending terminal buds, which are white from exuding gutta; the timber is hard, and sometimes used for building and other purposes. The proper mode of obtaining the juice is to tap the tree periodically; but the plan which was at first adopted by the Malays was to cut down the tree, and to collect the juice as much of the juice as possible. In the conservatory of Kew Gardens some young trees were planted, under the direction of Sir W. Hooker, the superintendent of that delightful retreat; but, from some unexplained cause, the experiment was unsuccessful. Contrary to the opinions generally held by several chemists, who have paid some attention to the subject, Mr. Cane, a very interesting and able chemist, of Dublin, who has devoted more time, perhaps, than any other person to a complete analysis of the material, reports that it is "a simple carbo-hydrogenous substance," and that in its ordinary state it is composed of at least two distinct materials, besides a notable proportion of sulphur. These two materials are first a hard, brittle, white, pure state, which is a white matter, and second a pulverulent substance of a dark brown or black mode of separating these two substances is exceedingly simple: a dilute solution of gutta percha is made in chloroform or in bi-sulphure of carbon, and, after a repose of some time, two very different strata are obtainable, the one being the solution of the white or pure gutta percha, while the other consists merely of the brown insoluble matter floating on the denser solution of white or pure gutta percha is obtained by separation and evaporation; and by repeated washing with alcohol, the pure material is readily separated from the brown substance, which can then be obtained in a pulverulent form.

In the admixture of foreign matter with gutta percha the material is very much reduced in strength, as has been ascertained by many persons, who, in order to place a cheap article before the public, have tried every kind of substance to bring down the cost. Thus, the handles of whips, which have been made of some of these materials, have been sent back by the purchasers to some of the manufacturers in the shape of dust. The same may be said of a spurious article called gutta percha, used for covering telegraph wires, which, after a short time, was found to be in the same state as the residue of the whip handles. One person was foolish enough to take out a patent for an admixture of powdered glass with gutta percha, specimens of which, after exposure to the atmosphere for only a few days, we found to be in a state of great decay. The only substances which are found to be beneficially applicable for the purpose of mixing with gutta percha, are caoutchouc, which belongs to the same family of plants, and plumbago, or black lead; in both cases the admixture of the two substances respectively being only about one-ninth of the weight of gutta percha. Pipes and bands made of gutta percha should not be used for twelve months after being manufactured, as they are found to become unseasoned, and to lose their strength very extensively. Under the influence of heat and pressure, gutta percha will spread to a considerable extent, and more so if mixed with foreign matters. If we except plumbago, all the mixtures of gutta percha and other substances are found to increase its power of conducting heat. In its pure state, gutta percha is an excellent non-conductor of electricity, and has been extensively used for insulating the wires of electric telegraphs. By heat gutta percha becomes soft, and the effect of heat on foreign colours mixed with the gutta percha is to give them a deadened appearance.

Perhaps there is no process more highly interesting than that of the manufacture of gutta percha by machinery, which is chiefly carried on at the gutta percha works near the City-road, and at Hancock's factory, at St. Austell. Although the processes are varied, and at these two extensive establishments differ in some of the details, the general mode of *operando* may be thus described—The crude blocks of gutta percha, as received from the docks, are in the first place cut into slices by means of a machine formed of a circular iron plate of about sixty inches diameter; in this iron plate are three slots placed radially for the reception of a many knives or cutters; the blocks being placed in an inclined wooden shoot, and each is set in the plate of rotation of the cutters; the slices thus cut off are transferred in baskets to a very great extent, readily be applied for the purpose, to a wooden tank containing hot water, in which they are left to soak until they are found to be a plastic state. The next part of the process is to subject the material to the action of a *mincing* cylinder, somewhat similar to that used by paper-makers for the conversion of rags into pulp; afterwards, the whole is thoroughly cleaned in cold water tanks, and when the gutta percha is found to be very impure, which is frequently the case, an article of commerce, a solution of common soda or chloride of lime is added to the water. From the cold water tanks the material is conveyed to the masticating machine, in which it is secured by the doors being bolted down. By this operation it is subjected to very great pressure, and this part of the process is the same as that used in the manufacture of caoutchouc. From the masticating machine the material is conveyed to a large roller, and thus converted into extensive sheets, of thickness regulated by the distance between the rollers. Sometimes it is passed two or three times between the rollers. These sheets are cut into bands of various widths by vertical knives placed at the end of the web or cloth by which the



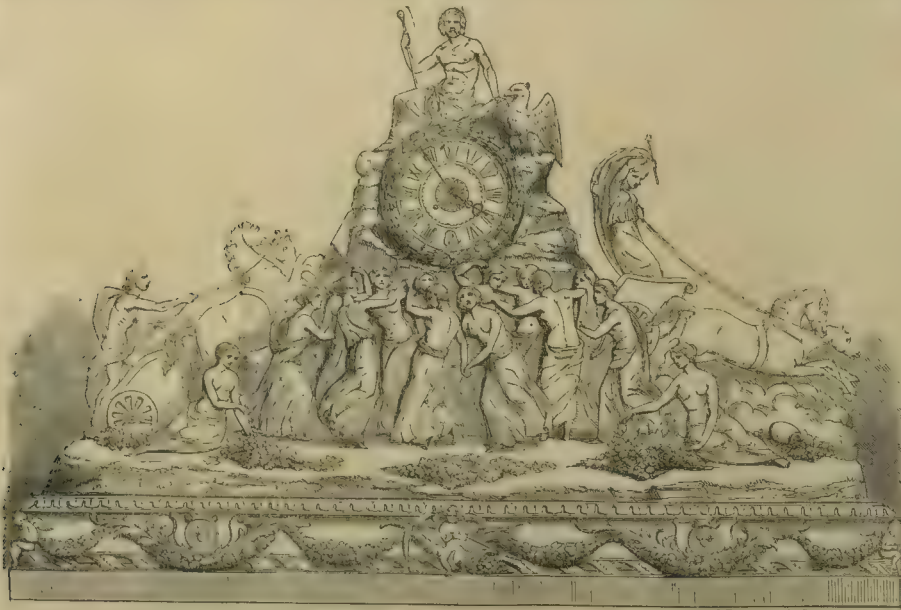
CABINET.—BY TANNER.

sheets are moved away from the rollers. The sheets are either cut into the proper width for lathe bands, or are stamped out for shoe soles, and various other purposes. For making tubes or pipes of gutta percha, a mass of the material is carried from the masticator to a horizontal metal cylinder furnished with a suitable piston, by which it is pressed forward into a die box kept hot by steam; at one end of



POPLIN PATTERN.—MESSRS. ATKINSON, DUBLIN.

the die box are a series of perforations through which the plastic material is forced into a cup, from which it passes out round a core, in its proper tubular form, into a long tank of cold water, through the whole length of which it is drawn by a line passing over a pulley, and returning to the person in attendance on the machine. The pipes are then coiled up and removed to the store-room.



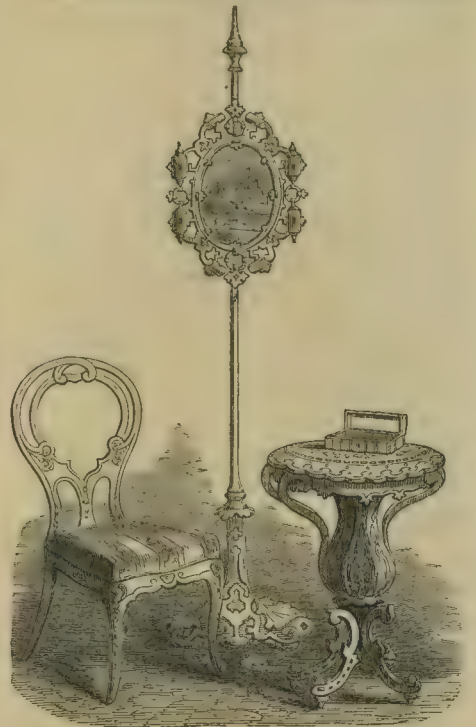
OR MOULU CLOCK.—HOWELL AND JAMES.—DESIGNED BY MR. ADAMS.

OR MOULU CLOCK. HOWELL AND JAMES.

Amongst the elegant display of jewellery and decorative articles exhibited by Messrs. Howell and James, is a clock, after an exquisite design by Mr. Adams. It represents the hours dancing round Mount Olympus; and is finished with remarkable delicacy and artistic effect.

FURNITURE IN PAPIER MACHE. BY JENNENS AND BETTRIDGE.

This little group represents three of the numerous elegant productions



PAPIER MACHE FURNITURE.—JENNENS AND BETTRIDGE.

in papier maché exhibited by Messrs. Jennens and Bettridge. The *legère* chair is of extremely graceful design, which is original and has been registered. The table and fire screen have all the lightness and delicacy of finish which suit them for a lady's boudoir. It is in these fairy-like productions of diminutive proportions that the light and highly ornamental material employed by Messrs. Jennens and Bettridge is most successfully introduced. To large and heavier works it is not so appropriate.

PORCELAIN CANDELABRUM. BY LAHOCHÉ.

Lahoché, of the Palais National, has a very fine display of porcelain and crystal, in dinner services, clocks, vases, lamps, &c. That which we have engraved is a handsome lamp or candelabrum in porcelain, and or moulu. The designs upon the former are painted in rich colours, upon a pale blue foundation.



PORCELAIN CANDELABRUM.—BY LAHOCHÉ.



MALACHITE DOOR AND VASES.—FROM RUSSIA.

MALACHITE DOOR AND VASES FROM RUSSIA.

The magnificent and unique productions in malachite, exhibited by the Demidoff family, are justly objects of great admiration in the Russian Court. The labour involved in their production must have been immense, malachite being a mineral found only in small pieces, which have to be joined together by a peculiar process to form such works as those before us. The doors are of stately size, highly polished, and enriched with or moulu. The vases are all of different forms, each very beautiful, and are also embellished with or moulu.

FISH-KNIFE, FORK, AND SPOON. BY LISTER AND SONS.

The fish-knife and fork are very happy and effective in design: the handles are of ivory, richly carved. The spoon is of a scroll pattern, very neat, and appropriate for general use.



FISH-KNIFE, FORK, AND SPOON.—BY LISTER AND SONS.

DIAMOND AND RUBY STOMACHER. MOREL.

Here we have one of the gems and glories of the Exhibition, which fairly rivals in attraction the Queen of Spain's jewels and the "Koh-i-noor" itself; a truly sumptuous production, upon which the jewellery trade of England might be bold to stake its reputation in face of the world. It was originally intended and destined as a bouquet, but is equally, perhaps more appropriately, available as a stomacher; moreover, it is so constructed as to separate into several distinct pieces of jewellery, according to requirement. The diamonds are all of the finest water; and the rubies are described as "an unique collection." The setting is contrived with springs, resulting in a waving or slightly oscillating motion when in use, which displays, to the fullest extent, the brilliant colours of the stones.

FLOWER-STAND AND CLOCK-CASE. BY POTTS.

These are two very happy specimens of the brass manufactures of Potts, of Birmingham. There is not much pretence at originality in the design, but the manner in which they have been turned out is unexceptionably meritorious.

WATKINS' AND HILL'S MODELS OF STEAM-ENGINES.

The sectional models of steam-engines contributed to the Machinery Department of the Great Exhibition, by Messrs. Watkins and Hill, should be examined by all who are unacquainted with the workings of the steam-engine, before they inspect the numerous machines in motion which are actuated by the power of steam.



DIAMOND AND RUBY STOMACHER.—BY MOREL.

By these illustrative sectional models all the internal actions of the different kinds of engines represented are clearly shown; but it is much to be regretted that these models are not rendered more useful by the attendance of a mechanical person appointed by the Royal Commissioners, in order to afford the necessary explanations to the thousands of inquiring visitors, very many of whom enter these sultry regions, exposing themselves for a long period together to a sort of sham-pooling process, for the express purpose of gaining knowledge with regard to a subject which is but little understood by the great masses of the people.

The first of this series of models is of a condensing steam-engine, motion to which is given by a pulley-line from one of the neighbouring engines. This model is chiefly constructed of brass, and is a piece of finished workmanship; on one side the exterior of the machine is shown, while on the other the interior is clearly laid open to view, with the action of the pistons, clacks, and valves, air-pump, condenser, &c.

The second model is chiefly of wood, painted, and represents in elevation and longitudinal section a six-wheeled locomotive engine of ordinary construction, in which the furnace, tubes, cylinders, cranks, smoke-box, blast-pipe, &c., are distinctly shown.

The third model represents a beam marine steam-engine; and the fourth, which is of smaller size, shows not only a condensing steam-engine complete in all its parts, but also the furnace and boiler, in which latter the steam is generated.



FLOWER-STAND.—BY POTTS.



CLOCK CASE.—BY POTTS.

resists the action of fire and acids. For general purposes its decoration is, of course, subject to the same laws as other materials; and in the examples before us, with much to satisfy, there is much to find fault with. The examples of the series are very pretty, and the less decorated of the plates are very excellent; the flowers, however, are generally very badly drawn, and the painting inartistic and wanting in relief. The Worcester manufacturers should attend to these points.

COALBROOK DALE.

Messrs. John Rose and Co. (47) of Coalbrook, make, on the whole, a very satisfactory display; but the marks we have made as to the want of accurate artistic knowledge in carrying out details as seen in the Worcester china, are applicable in the case too. With an amount of labour of an almost fearful character, there is little real artistic result; yet no one can doubt the effort, and wonder that the same house which could carry out the very beautiful examples of a less ambitious character to be found in this collection, could have wrought out the other. Nothing can possibly be more satisfactory, or more magnificent in appearance, than some of the specimens of dinner services placed at the back of the case. These in blue and gold are very beautiful. Then the Rose Dabury service, to which we shall again allude, is everything in colour which the most fastidious could desire. Indeed, the colouring, generally, is excellent, except where, by overstepping, blackness has been the result. Some of the examples of tea services are very charming; and those with blue and gold interlaced ornament are perfect of their kind. The dinner plates are, however, too much overloaded with detail, and want more simple effects.

In Parian, a great effort has been made by this house in getting up probably the largest group yet executed in this material. As already indicated we doubt the policy of attempting these large examples; and giving Messrs. Rose full credit for the attempt, cannot think it has been so successful as perhaps it deserved to be. The sentiment of the group which represents the "Platonic service" is unquestionably where to leave off is a point to which the attention of our manufacturers requires to be directed. The Parian ever exhibited in this case is a mistake. Before quitting these examples we cannot but express our regret that both Messrs. Rose and Messrs. Daniell should have marred their display by glass cases, which for this class of articles, and in such a light, appears very objectionable, as it shows the examples to a disadvantage.

LONDON.

Messrs. T. and M. S. Brown, 47, St. Martin's-lane, make a very pretty display. The principal examples are very good, but there is too much of the "shop" in mixing the china, &c. with glass. The method of showing the Portland Vase, which is so mounted that the design upon the bottom is seen, is very good. There are other exhibitors, to whom, had space permitted, we desired to call attention, but cannot do so now. We must not, however, fail to do justice to the very admirable display of patent ironstone china made by Mr. C. Mason, of Longton, and which ought to have been alluded to in connection with the Staffordshire Pottery. If the Chinese type is the true one for this class of manufacture, then is Mr. Mason's exposition a perfect one, for it is sufficiently Chinese for the most fastidious of Celestials—vases, scent-jars, garden-seats, &c., in which dragons of sufficient ugliness, and gilding and colours of sufficient brightness, are all brought together in glorious but orderly confusion; and the whole group is one of interest to the admirers of this peculiar school of decoration.

We had intended to conclude these notices with some general comparisons between this display and that on the Foreign side, but must postpone them until our notice of the productions from the Continent.

THE CONTRIBUTIONS OF RUSSIA.

THE accident that has placed the produce of Russia next to that of the United States is curious and suggestive. The greatest empire next to the greatest republic—pure despotism side by side with perfect self-government, vigorous private enterprise compared with the results of Royal patronage; yet there are strong points of resemblance between the two countries. Barely 160 years have elapsed since Peter the Great, while commencing the task of Europeanising and civilising Russia, worked by day in the shipyards of Deptford, relaxed by driving a wheelbarrow through Evelyn's beautiful holly hedge at Sayes Court (a hedge still in existence), and sat up at night drinking brandy and pepper with the Marquis of Carmarthen. But sixty-eight years have passed away since Benjamin Franklin, dressed in the brown suit in which Wedderburne had abused him as a rebel, attended as Minister Plenipotentiary from the United States to sign the treaty of peace by which Great Britain acknowledged the independence of the Republic. Both have made rapid strides in that brief period. Both have invited immigration. The Russians on plan, rule, and system; the Americans by free liberty to labour and great chances of independence. Both have still huge tracts of land to be cultivated. Both are rich in raw produce and natural wealth. But the progress of Russia depends almost on one irresponsible man. The progress of the United States depends on the continued vigour of a nation which so far has proved itself equal to every opportunity. The Russian confides in his emperor; the "Statesman" depends on himself. The American people have made the United States the great nation it is. But no man of observation can doubt that it has been the hard hand of despotism which has raised the Russian empire from the condition of semi-barbarism in which it existed in the time of our William III.

The Russian exhibition consists of two compartments of a totally different character. In the North side of the Nave are to be found rich green malachite vases, the produce of the imperial manufactories. Some of these works are of extraordinary magnificence, particularly the green Jasper or malachite doors, the chimney-pipe and stove. There are also several gigantic vases of painted china made after the fashion of Sevres, tapestry carpets of great magnificence, jewellery as splendid as gems can be made under the hands of a Parisian workman, particularly a box on which the natural colours of purple grapes, peaches, and other fruits have been imitated in precious stones. By the side of the Jasper vases lie lumps of the raw material, some as large as a foot-ball. The whole of this collection, with which a few weapons of war are intermixed, composes a brilliant museum of what may be termed *Royal toys*, in contrast to the spades and axes which compose the *heavy steel toys* of Birmingham. They are not made for profit or the subject of any export trade. It is part of the Emperor's State, in the same way that he has tall horseguards and footguards, to have certain imperial manufactories where porcelain, Jasper vases, and tapestry carpets are manufactured, without regard to expense, either to adorn the imperial palaces or to be presented to his friends and allies.

On the same principle we find that the Emperor has lately sent young men to Rome, to become pupils of the most eminent artist in mosaic, with the view of founding a manufactory of mosaic in St. Petersburg.

It is understood that the porcelain manufactory is under the direction of Frenchmen; and although the Russians have shown great talent in making external copies of various works, they do not as yet seem to understand the meaning of honest workmanship in articles that require exactness of fit. Indeed, in St. Petersburg, almost all work of fine art or taste is in the hands or under the direction of foreigners. The malachite vases are not, as they would at first sight appear, solid, but covered, as it were, on copper. The expense of their construction is very

much increased, when, as in the instance of the splendid specimens exhibited, it is determined to complete every wave and shade of the vein, for then it becomes almost as difficult a work as mosaic.

The malachite is found in the copper mines in which Russia is so rich; some of the finest specimens have been obtained on the property of the Prince Demidoff. It has also been found in considerable quantities in the Burra Burra mines of South Australia, and hence lately come into fashion for colonial brooches and bracelets. Almost all the articles exhibited in this Northern Bay are the produce of a system, almost universal among the monarchies of Europe, of carrying on Royal or National manufactories, as a matter of luxury and as an example of taste. Such in France are the national manufactories of Gobelins tapestry, of Beauvais carpets, and Sevres china; in Prussia, of iron-casting and porcelain; in Saxony, of porcelain; in Russia, of every kind of manufacture. To several of these establishments, particularly in Russia, and in the Gobelins establishment in France, schools for instruction in drawing and painting as applied to manufactures are attached for the benefit and the due training of workmen. In England, it is with difficulty that money is obtained for schools of design; but although we wisely rely on private enterprise for manufacturing excellence, it would pay us to devote more money to cultivate taste.

Russian Carriages.—On leaving the splendid department dedicated to luxury and fine arts, we find in the small avenue to the north some more real and utilitarian specimens of Russian industry, in a set of very handsome carriages, of a peculiar national form. These are the Russian drozky, equally available on wheels, or in the winter on runners, and the favourite carriage of Russian gentlemen. They are on four wheels, very low, with a strong forked perch, and a double body, the first of which holds one or two persons abreast. There are specimens of both kinds: the other merely holds a seat for the driver, who sits close upon his horse or horse; when a pair are used, the correct thing is for a shaft-horse to trot, while the second, harnessed to an outrigger, gambols at a canter beside him.

It will be necessary to give an illustration in order to afford a correct idea of the shape of these vehicles. They are very striking, but suited to a military nation. They allow of no lounging; the passenger must sit as upright as though he were driving himself in a dog-cart. It is not considered correct for ladies to be seen in them in large towns, but of course they are occasionally used in the country. With a little lowering of the seat, they might be copied with advantage here, and would prove a pretty novelty. The workmanship deserves unqualified praise, except the shafts, which are inferior. The wheels are of a peculiar shape, and the spokes are particularly well arranged—no stitching appears, and they look like pieces of solid iron; the lining and the varnishing are equally well finished. If the wood is sound and well seasoned, they are not dear at the price set upon them—£47. A set of harness hangs up in the large room, which is also of a fashion peculiar to Russia. We should recommend the obliging Russian Commissioner to procure a wooden horse, so as to exhibit a complete set of harness. It is difficult to explain to those who have never seen them in use, the arrangement of a great birchwood box, which is an indispensable ornament of Russian harness, and from which bells are suspended over the horse's neck. Close to the carriages are a pair of very light sledges of iron; these harnessed to horses are used for running races on the ice of the Neva in winter, and awful cockle shells they seem to go any pace. The driver sits on a low bench, and supports his back. Steeple-chasing must be child's play compared with such sport.

Crossing the main avenue to the South Bay we enter the compartment in which the staples which constitute the export trade of Russia, with several curiosities, are arranged. These are important almost in proportion as they are unattractive: one part of the walls is hung with leather, including choice specimens of the "Russia" deer to boot collectors. On the counter, with many pairs of boots and shoes, requiring no particular notice, being made of Chinese, of Russian, of Persian, and of German, or English, are a pair of dress-boots, made of the thinnest and best calf leather we ever remember to have seen. It is as soft and flexible as kid, but stronger. We are informed that the material is used in Russia for full dress boots. If it can be delivered here at a reasonable price, a large demand is certain. All the leather exhibited is well tanned, soft, and a good colour.

Stockings.—On the same counter as the leather are a number of stockings, shoes, and other articles made of felt by the Russian peasantry. A very curious manufacture indeed, well worth the examination of the trade. Each article seems felted separately, and made solid yet soft. The shoes are regular sabots, two inches to three inches thick in the sole, apparently moulded on a last, strong enough to resist the cut of a sword or even a bullet, and yet soft and warm inside. For travelling in winter they are very comfortable. But this method of making shoes is not adapted to many other purposes. On the opposite table are basins, jugs, cups, helmets of the same material japanned inside and out. They are light, tough, and not to be broken. A washhand jug and basin are rather dear (17s.), but they would be famous articles for sea voyages. Gutter percha has been tried for that purpose, but it melts in tropical climates. We advise our outfitters to look to this.

Provisions.—A trophy of almost every kind of agricultural produce, very elegantly arranged, containing every kind of wheat, barley, oats, rye, buckwheat, flax, hemp, peas, and beans grown in the Russian dominions, occupies the centre of a counter, round which are arranged in bowls the seed and flour of these articles. Among them our cooks may find it worth while to try a small kind of dried pea for winter use, in soups, of a very sweet taste. On the walls around are specimens of the famous Russian hemp, raw and manufactured, and of the flax, rope and twine, which, with grain and tallow, are too well known to our merchants for this last hundred years to need further notice.

Dried Provisions.—In the same department is an extensive collection of dried provisions, including *caviare*, dried sturgeon, *islinglass*, a substance resembling islinglass made up in the shape of a raw whip which is obtained from a fish called the *Vesiga*, and used in Russia to make pies; but, perhaps, the article most likely to become a new staple of commerce to the West, now imported as a curiosity, for the first time.

This article, so much used in this country for making sauces and soups in clubs, hotels, and great houses, is obtained in Russia by boiling down the flesh of horned cattle, which, on the plains of the interior, are only valuable for their hides and tallow. Anything that can be made out of concentrated meat or glass is so much additional profit. But it is an operation which requires care—a little burning will spoil the whole eating. Little gives directions for the operation in its last work: as commonly conducted, the product affords very little nourishment.

Iron and Steel.—In the avenue behind the bay just described, the specimens of iron and copper, in ore and in a manufactured state, are displayed. The iron, some of which is of a very fine quality, is a matter of interest to us, because Russia, in conjunction with Spain and Sweden, supplied most of the iron consumed in this country for more than 100 years, before the time that the iron was first smelted in Surrey, Sussex, Kent, Staffordshire, and Worcestershire, was exhausted, and the successful application of coal to smelting iron, by Abraham Darby, at the Colebrook Dale works, in 1718, and the application of the use of blowing cylinders, instead of bellows, at the Carron Works, set up by Smeaton in 1760.

Our connexion with the Russian iron is of very ancient date. In 1569 the English obtained by treaty the right of seeking for and smelting iron ore, on condition that they should teach the Russians the art of smelting this metal, and pay, on the exportation of every pound, one halfpenny.

Every branch of mining received great development under Peter the Great, who seems to have neglected no branch of material prosperity. It was under his reign and direct patronage that the Demidoff family rose to importance as miners, and obtained the property of the mines, which they ever since one may watch in the map of Europe. Up to 1784, Great Britain imported a continually increasing quantity of iron from Russia, which in that year amounted to forty thousand tons; after that period, in consequence of improvements in machinery for smelting by coal, the importation gradually declined to about five thousand tons in 1805, and continued at that figure up to 1837, and, probably, is about the same now, being all of one quality in the trade, called *Co. No. D*, old saddle iron, which is not fit for the manufacture of steel.

Fire-Arms.—The fire-arms and white-arms exhibited have all been made out of one of the four Crown manufactories, where the work is done under the inspection of Government officers, by serfs of the Crown. The oldest manufactory is at Tula, where, besides muskets and side-arms, the iron-work of horse harness, iron bedsteads, files, chains, &c., are made. This establishment was burnt in 1854, according to the rumour of the day, by the workmen, who hoped to get rid of the forced labour imposed on them by the ceaseless wars of the Emperor in Turkey, Persia, and the Caucasus. Under the Russian Royal Factory System, increased work does not give increased wages. But the Tula establishment was rebuilt.

In the North Gallery, the Emperor exhibits, with other furs, a black cloak made from the neck of the silver fox, which he has valued at £3500; this valuation has brought out a letter from Mr. Nichol, of the well-known furrier, who offers to make a finer cloak for £1000, and explains that black and silver fox skins, so much valued in Russia, and so

little used here, are chiefly imported into London from the territories of the Hudson's Bay Company, and then purchased up for the express purpose of "being smuggled into Russia as occasion may offer."

What a commentary on the Russian protective system!

In the back of the same case as the furs are two splendid specimens of twilled shawls, by a Cossack woman, from white goats' hair, of wonderful fineness. One of these shawls is the property of the Empress, and justly valued at the price of Brussels lace. Russian manufactures are for the most part inferior and dear, while mineral, and vegetable, and animal produce could be supplied in unlimited quantities at a profit, if roads were made and facilities given to trade. But Russia is essentially a military country, prepared to take advantage of events, and probably the Emperor considers that a large trade might produce inconveniently pacific tendencies in his landowning nobles.

In conclusion, we consider this a very attractive but imperfect representation of the vast resources of Russia.

ENTERTAINMENT AT LIVERPOOL IN HONOUR OF THE GREAT EXHIBITION.

ANOTHER visit paid by the celebrities of the Exhibition to one of our great provincial towns took place on Saturday, the 12th instant. Only recently we gave an account of a reception at Birmingham to the distinguished men connected with the Exhibition, and which, though unattended by any pomp or pretentious ceremonial, was full of a deep significance and interest to all who shared in it. Birmingham, the first town to originate a local exhibition of its own, was appropriately first in the field to welcome the chief actors in the World's Fair down into the provinces. After Birmingham, Liverpool put in her claim to be visited, but in a style peculiar and characteristic. The invitation is given by her leading merchant, the member for the southern division of the county. He undertook to do the honours of the occasion himself—thus forming an example, even in hospitable guise, of the private enterprise, united with public spirit, which have combined to make the place what it is. Again, visitors were not asked to go a long journey in order to see different ingenious processes of manufacture. In harmony with the greatness of Liverpool, they were to examine its miles of docks and warehouses—to appreciate by actual inspection the extent of its mercantile marine—to realize the enormous importations of raw produce and the equally vast exports of manufactured goods. They were to have an opportunity of perceiving how great are the advantages of system and order—how a large expenditure in public works, which secures these, is a wise economy in the end. Finally, they were to dine with their host on board one of the great Transatlantic steamers, herself a world of wonders complete—a great exhibition afloat; as this ship was American built and owned, it was only natural that the occasion should be seized on for illustrating the strong practical ties of commerce, superior to prejudice, which, mainly through this port of Liverpool, bind together the parent state and its vigorous and independent offspring.

The invited guests found their way down to Liverpool as best they could, the foreigners getting passes and the natives paying their fares as usual. At 10 o'clock on Saturday morning they all assembled at St. George's Dock landing wharf, where they embarked on board a river boat, and, under the guidance of Mr. Brown, who received them there, proceeded to view the steam-ship *America*, then with her steam up and waiting for the mail bags to start for New York. The spacious quarters, the cabin accommodation, the machinery, and the stores of this fine vessel, were all attentively examined. The Alderney cow to supply milk, the poultry, the joints of meat enveloped in masses of Venham Lake ice—these, and a hundred other details, were carefully noticed. Next came the company of passengers, so thoroughly American in their physique, fall to attract attention. At length the mail bags were all received, the noble ship started on her way, and, with a parting salute and cheer, Mr. Brown and his friends left her to pursue her voyage. The strangers then betook themselves to the Birkenhead side of the river, where they landed and strolled about for some time, viewing with interest that remarkable example of overhauling and other indications of states of greatness and prosperity which Birkenhead abounds. From this place, and the natural train of thought associated with it, Mr. Brown conducted his guests to the *Atlantic* steamer, anchored in the Mersey, and now once more ready for service, having had the recent accident to her machinery completely repaired. As they went on board they were received by the commander, Captain West, who courteously showed them every detail of the ship worth seeing. The *Atlantic* is fitted with a splendid part of the machinery, and one feels quite at a loss whether to marvel at the great sweep of her quarter-deck, the magnificence with which her state-rooms and berths are equipped, or the cyclopean dimensions of her engines. After completing their survey of her, the company returned to the Liverpool side of the river, and, led by Lord Granville and Mr. Greville, made their way to the new Albert Dock, the various striking improvements in the construction of which were fully explained to them. Of these perhaps the most remarkable is the application of the hydraulic press power by Armstrong's patent in such a manner as to secure the complete action of cranes, ascending platforms, and other machinery used in docks, at any point, however distant from the press, and by means so simple that the strength of a child can completely control them. There is a small working model of this beautiful invention in the Crystal Palace, which at once indicates its great utility. The extent and contents of the bonded warehouses seemed particularly to astonish the foreigners, who, on entering one room filled with nothing but tea-boxes, and on asking a few very simple questions, were told that a number of boxes was 20,000, the quantity less than usual, and about a week's consumption for the whole country! They also appeared a good deal surprised at a range of warehouses filled with raw cotton, and considerably longer than the Crystal Palace. The Custom House was afterwards visited, and, lastly, St. George's Hall, a new building now in process of construction, where justice is to be administered, balls to be held, and concerts to be given.

Four o'clock had now arrived, and with it the period fixed for again taking to the water and going on board the *Atlantic* to dine. There Mr. Brown had caused to be prepared a magnificent entertainment, at which, notwithstanding some important omissions, and some of the shuffling and unbecoming behaviour of the North-Western Railway Company, there was nevertheless a large and highly distinguished and influential company assembled. When dinner had terminated,

Mr. Brown gave the "Health of Her Majesty, as Duchess of Lancaster," which of course was responded to with great loyalty.

"His Royal Highness Prince Albert, and the rest of the Royal Family," were next toasted; after which the "President of the United States" was proposed, and Mr. Davis acknowledged the toast.

Mr. Brown then gave the "Health of the Royal Commissioners."

Earl Granville, whose name was associated with the toast, acknowledged the compliment paid to that body. There was at the Exhibition, he said, a model of the docks of Liverpool, to which excessive interest was attached, even more than by some was anticipated, and was daily surrounded by crowds who had never before been so near the shipping and the docks. He felt grateful to Mr. Brown that he had not been satisfied with the imperfect notions which models give—and that he, one of the merchant princes, in the true sense of the word, who had brought Liverpool to what it now was, who had enriched it by their commercial enterprise and their ability which they had an opportunity of seeing, who had benefited it by their attention to the liberal sciences, and who had sacrificed it to magnificent charitable institutions—should have been so graciously associated with the great entertainment, given their distinguished foreign guests an opportunity of seeing a town, of which he and his fellow-citizens might be well proud. If there is a point that could add satisfaction, it was, in giving this reception, it took place in one of the Transatlantic steamers, and under the American flag. With the most sincere pleasure he acknowledged the propriety, in Liverpool, of their meeting on what might be termed American ground, and there strengthening the feelings of friendship which existed between the United States and this country. There was in the Exhibition, besides the model to which he referred, a collection of raw material, made by Mr. Archer, for the instruction of merchants, and curious as representing the number of raw materials sent to this port from every country in the globe. To-day they have seen the ships which brought that produce, and the magnificence of the docks in which they were stored, and they were wished to impress on their attention, and on that of the foreign guests, was the proof thus afforded how much the prosperity of Liverpool and this country depends on the welfare of those countries which these gentlemen represent. (Loud



THE CARRIAGE DEPARTMENT.—FROM A DAGUERRETYPE BY CLAUDET.—(SEE NEXT PAGE.)

cheers.) He thought they would feel that it was no empty wish on the part of the people of this country, to hope for the future prosperity, for the order, the liberty, and the commercial improvement of all foreign nations. (Cheers.) And when that wish was pronounced, though founded on feelings of self-interest, it was combined with other and higher sentiments—(Cheers)—sentiments which had received a great impulse from the cordial manner and goodwill foreigners of all countries had shown in co-operation with the objects of the Exhibition. (Cheers.)

"The Executive Committee," "The Mayors of South Lancashire," "The healths of Mr. Paxton and Mr. Fox," were amongst the toasts which followed.

Dr. Herman responded to the toast of the "Jurors," in German. He expressed his confidence in the impartiality with which their awards would be made, and said that he had recognised in their proceedings and action hitherto some of the principles which constituted the greatness of England. It was to the concentration of the mind on one point that she had acquired possessions in every part of the world; and in the same way she fulfilled her mission in spreading civilisation to the remotest nations. The impression of the working of this great principle was not lost on those foreigners who had been witnesses of it. The consequences of the Great Exhibition would not be merely commercial, but would also be found in the general influence of her great example in working and acting. (Cheers.)

A series of sentiments were then proposed by Mr. Brown, and were most cordially received by the company. The first of these was, "Success to the undertakings of all men of letters and science, engineers, and mechanics, whose heads and whose hands have added considerably to the social comforts of mankind."

To this succeeded the toast of "Peaceful Commerce—may it ever

flourish, to carry religion and civilisation into the remotest corners of the world."

The next toast was, "The Armies and the Navies of the great nations of the earth—may they ever meet as friends, and not as foes, to co-operate for some great public good."

The next toast was, "The World's Commercial Fleet—may it continue to navigate the ocean, free from war's alarms, and add to the prosperity, the happiness, and the comforts of the whole human race."

Captain West, in brief, sailor-like style, returned thanks for his health being proposed, in acknowledgment of the courtesy with which he had received the company on board his ship.

Earl Granville then rose, and asked the company to drink to the health of their host, which, of course, they did very enthusiastically.

Mr. Brown, in returning thanks, assured his guests that it was a source of great satisfaction to him to meet so many distinguished individuals who had visited the Crystal Palace, or rather he would call it the Palace of Peace, by the contents of which the nations of the earth would learn to appreciate each others work. (Cheers.) His only regret that day

was the shortness of the notice, which circumstances had rendered unavoidable. He had been deprived of the gratification of receiving many guests whom it would have given him great pleasure to see present. (Cheers.)

It would, no doubt, be gratifying to those gentlemen who had honoured him with their company, to be informed how rapidly the important seaport town of Liverpool had risen into its present position, and he would therefore briefly trace its history. In the reign of Charles II. they had but 15 boats at this port, the tonnage of which amounted to 2560. In the reign of Queen Anne these vessels had increased to 170. He thought they had seen enough that day to form an opinion as to the present number. In 1756 their dock dues only amounted to

£2200; in 1801 they had increased to £27,000; and last year they were £230,000. Their docks now covered an area of between 200 and 300 acres, and had cost in their creation no less a sum than £10,000,000. The population of the whole county in 1700 was 170,000, and at present it was upwards of 300,000; but the increase in the inhabitants of the town itself had been still more remarkable, having been in 1700 only 6000; in 1801 it was 75,000; and in 1851, upwards of 400,000. In 1760 it took four days to go by coach from Liverpool to London; now they were enabled to reach the metropolis in six hours; while by those splendid vessels, one of which they were then on board of, they could travel from Liverpool to New York in nine or ten days. (Cheers.) It was a most gratifying thing to him, that America, the offspring of their own nation, was now her firmest friend and best customer; and he trusted that the day would never arise when the good feeling existing between them would be disturbed. (Cheers.) He wished to impress upon foreigners, that it was their interest to give to this country whatever was of least value to themselves, but most valuable to us; while Englishmen would give them in return whatever was least valuable to themselves, but of most value to their friends. (Cheers.) Mr. Brown sat down, again thanking the company for the honour they had that day conferred on him by accepting his hospitality.

This terminated the festivities on board the *Atlantic*, but they were resumed and continued to a late hour at the Town Hall, the fine suite of rooms in which were thrown open to some 1200 to 1500 gentlemen, comprising all the influence, respectability and wealth of Liverpool. The Mayor, though the chief duties of receiving the strangers devolved upon Mr. Brown, welcomed them with great hospitality, and the foreigners especially appeared immensely gratified with the cordiality of their reception.



ENTERTAINMENT IN HONOUR OF THE GREAT EXHIBITION ON BOARD THE "ATLANTIC," AT LIVERPOOL.

THE CARRIAGE DEPARTMENT.

THE Carriage Department, which is included in Class 5—that of “Machines for Direct Use”—is not without its wonders and its attractions for the whole locomotive community, from those who “ride in chaises” of their own, to those who take their fourpenny-worth in a “bus,” or make their last journey in a hearse. And all may be here provided. The contributions are abundant, coming from every part of the United Kingdom: Dublin, Edinburgh, Southampton, Birmingham, Bath, Bristol, Worcester, Hastings, Greenwich, have each their display, of some sort or another. Long-acre and Bond-street, of course, have the largest, and perhaps the stateliest show; but Dublin and Southampton are not far behind. We shall defer our general review of the contents of this department till a future occasion; meantime, we shall only notice one or two contrivances which attracted us by their novelty upon our first flying visit. The supply of cars and dog-carts is rich in particular, for their novelty in structure in many cases, and generally for their extremely dashing appearance. Anderson, of Elgin, sends a Victoria car, a two-wheeled vehicle, seated for four, and convertible into a two-seated gig or car by a single turn of the key. Cousins, of Oxford, also, has a somewhat similar contrivance, or two-wheeled sporting carriage, adaptable, by means of a concealed screw, for either two or four persons. Kesterton, of Long-acre, has an “Amempton” carriage, a close, double-seated carriage of novel design, which, by a very simple contrivance, may be converted into a light, open barouche, being thus adapted either for summer or winter. These and other similar contrivances for making two descriptions of vehicle out of one, are certainly very ingenious; though, practically, we must say we question their advantages. Certainly, as far as solidity and lasting quality go, we prefer a simple, single-purposed vehicle. Baskcomb, of Chislehurst, has a “model carriage,” which, amongst other merits, presents that of a contrivance for indicating the distance of ground travelled over. This, when it is carried successfully into effect, as it must one day be, will be a very important point gained, not only as regards hired vehicles, but private carriages, the owners of which, for the sake of their horses, are always interested in knowing how much ground has been gone over in the course of the day by the servants or others entrusted with the vehicle for the time being. Willoughby, of John-street, has a very completely equipped carriage for invalids, whereby they may be removed from their beds without any change of posture. An interesting wax lady, with rather blooming cheeks and remarkably neat cap, occupies this vehicle, being occasionally drawn forth amidst the breathless admiration of bystanders. The undertaker-general, Shillibeer, has a very spruce



J. L. WILLIAMS S.

SIDEBOARD.—BY JACKSON AND GRAHAM.

patent funeral carriage, “expanding and contracting at pleasure,” so that single gentlemen and family parties may be accommodated at a moment’s notice. Model omnibuses of gorgeous colouring, and unlimited resources, are sent in in competition by various makers, and we hope some of them will be tried in place of the rusty, uneasy-going rattles-traps which ply upon many of the roads contiguous to the Great Exhibition, to the great astonishment and discomfort of the bones of her Majesty’s liege subjects.

ORNAMENTED MARBLE TABLE. BRIGHT.

This table is manufactured in Derbyshire black marble, ornamented with flowers in various-coloured stones, serpentine, lapis lazuli, &c., by Selim Bright, of Buxton, in Derbyshire. The design and execution are alike creditable; the workmanship being most minute and intricate—some of the flowers, we understand, containing many hundreds of separate pieces of stone.

MOSAIC TABLE-TOP. BARBERI.

In our Supplement for the 12th of June we gave an article explanatory of the construction of mosaic pictures, with particular reference to the school of the Vatican, which may be considered the fountain-head of the art. In our present sheet we engrave a very beautiful table-top by Barberi, of Rome, the border of which contains a variety of views of public buildings, and other celebrated spots in Italy. The patient industry, ingenuity, and taste displayed in the production of these works are truly wonderful; and, what is more, the beauty of the result is fully commensurate with the labour bestowed.

SIDEBOARD. BY JACKSON AND GRAHAM.

This is a very substantial and handsome production, upon which an immense amount of inventional taste, and manual labour in the carving, have obviously been bestowed. The ornamentation is rich in the highest degree, and almost to be styled ambitious; but the general arrangement is so chaste, and the harmony and repose resulting from the adoption of a single description of wood—British oak—so complete, that the eye is by no means fatigued, nor the attention unduly taxed by details. The upper part is generally after the styles of Elizabeth and Francis I. Within the columns are handsome mirrors. The sideboard is supported by four little boys, of whom the two at the extreme ends are emblematic of wine and bread respectively, whilst the two on the inside stand as the representatives of fishing and hunting. On the panels are groups of fish and game, and other appropriate subjects, carved with remarkable boldness and exquisite finish.



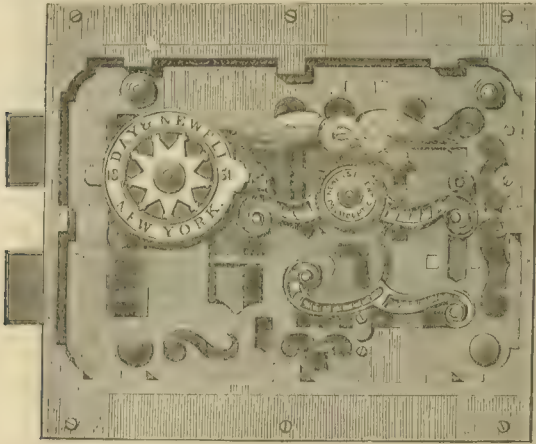
MOSAIC TABLE-TOP.—BY BARBERI.



ORNAMENTED MARBLE TABLE.—BY BRIGHT.

NEWELL'S PATENT PARATOUPTIC BANKLOCK.

Few things in the department of the United States have attracted more attention than the safety lock of Newell, both from its own merits, and the great controversy now going on about locks, in consequence of the feats of lock picking performed by Mr. Hobbs, the agent of Messrs Newell,



DAY AND NEWELL'S PATENT AMERICAN LOCK.

and other ingenious Americans. Of this controversy, and their ability to pick those hitherto considered perfectly safe in this country, we shall at present offer no opinion, as the matter is under the consideration of the Society of Arts, and will be properly investigated by them.

That Mr. Newell's lock is one of very ingenious and beautiful construction, there can be no doubt; and, as he deserves, he has received medals from some public institutions and scientific bodies in America and Europe on account of it. The most important feature in the Newell lock is, that the owner can, with the greatest facility, change the inter-

component parts, fitting into each other. When the bolt is projected, it dissolves the mutual connection of the constituent pieces, and carries along with it such as are designedly attached to it, and which assume the particular positions given them by the key in its revolution. These parts are rendered permanent in their given form by means of a lever adapted for the purpose, while the parts not united with the bolt are pressed down by their springs to their original places. If now the bolt is to be returned again—in other words, if the lock is to be unlocked—the constituent pieces or tumblers, which are in the original state, must, by means of the key, be again raised into that position in which they were when the lock was closed; otherwise, the constituent parts attached to the bolt would not lock in with the former, and the bolt could not be returned. Nothing, therefore, but the precise key which had locked the lock can effect the object. This lock is said to have another peculiar feature, one of considerable value, that it will withstand the action of gunpowder.

CHUBB'S LOCKS AND SAFES.

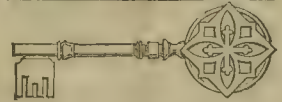
The articles sent for exhibition by Messrs. Chubb, comprise specimens of their patent detector locks and latches for various purposes. Each lock consists of six distinct tumblers (except in the very smallest sizes), working on a centre pin; all of which require lifting to various heights by the key before the lock can be opened or shut; and not until each tumbler is lifted to its proper position, can the stud, which forms a part of the bolt, pass through the slots in the tumblers. A "detector," forming the great and peculiar feature of Chubb's lock, is added; and, in the event of either of the six tumblers being overlifted, in an attempt to open it by a false key or picklock, one of them is caught by a detecting spring in such a manner as to render it impossible to open the lock on the application of its own key. Notice is thus given of the attempt, and the lock may be set right by turning its key in a contrary direction, as in locking.

In design the locks are of various styles, Norman, Gothic, Elizabethan, &c., with appropriate steel and or moult mountings, and ornamented keys, suited for ecclesiastical buildings and other purposes.

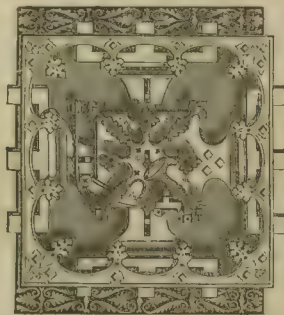
The patent quadruple lock for a banker's strong room door, consists of a combination of four separate and distinct locks in one, all being acted upon at the same time by a single key with four bits. For further security, there is a check lock in addition, throwing a hard steel plate over the large keyhole. The patent rim lock contains eighteen tumblers, with three different detectors, each acted on by six of the tumblers, and has been constructed to show the principle of Chubb's three different patents, dated 1834, 1833, and 1847.

The patent fireproof bankers' safe is made of wrought iron, the iron of the body being $\frac{1}{2}$ inch thick at the thinnest part, and the doors 1 inch thick, the whole being lined throughout with hard steel plates to prevent drilling. To render the safe fireproof, it is lined with two separate and distinct chambers, 6 inches thick, filled with dried non-conductors of heat. The interior is fitted up with drawers, cupboards, &c., in a manner suited to bankers' or merchants' use. The folding-doors are secured by two patent detector wheel locks, throwing twenty-eight bolts out

all round, by simple compression, that which was formerly done by means of repeated blows of a hammer; and that before the rivet has lost its heat, so that by its contraction in cooling it grips the plates still tighter together. This machine is capable of fixing in the firmest manner eight rivets, three-quarter inch diameter, in a minute, with the attendance of



CHUBB'S LOCKS AND KEYS.



CHUBB'S LOCK (INTERIOR).

all round, and are further fitted with case-hardened iron scuteen locks over the keyholes of the principal locks. Its dimensions are 6 feet 6 inches high, 4 feet wide, and 3 feet deep, and its weight is 3 tons 5 cwt.

Messrs. Chubb also exhibit a model of their patent well safe, by means of which a safe containing any valuable property can be lowered to any distance below the surface of the ground, and secured by a fireproof door and framework at the mouth of the well.

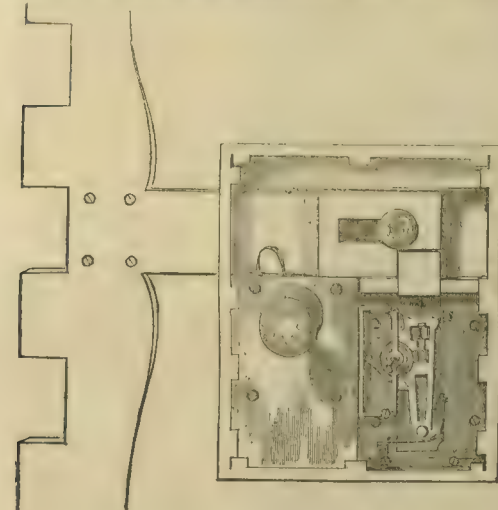
FAIRBAIN'S PATENT RIVETING MACHINE.

This is a machine lately invented and brought into use by the Messrs. Fairbairn, of Manchester, for riveting the seams of boilers, &c. It owes its origin, we believe, to a turn-out of the boiler-makers in the employ of the exhibitor, about fifteen years ago. The principal advantage attributed to it is that it does noiselessly, at once, and with unerring pre-

cision, by simple compression, that which was formerly done by means of repeated blows of a hammer; and that before the rivet has lost its heat, so that by its contraction in cooling it grips the plates still tighter together. This machine is capable of fixing in the firmest manner eight rivets, three-quarter inch diameter, in a minute, with the attendance of

two men and two boys to the plates and rivets; whereas the average work that can be done by two riveters, with one "holder-on" and a boy, is forty similar rivets per hour—the increase in quantity of work done by the machine being at the rate of twelve to one, exclusive of the saving of one man's labour. The work, also, is done better, for reasons already stated, the boilers being more secure from leakage than under the old method.

The construction of this machine will be easily understood, by those conversant with mechanical and engineering contrivances, from an inspection of the Engraving. The large upright stem is made of malleable iron. The riveting dies are of various descriptions, adapted to every description of flat or circular work; even the corners are rivetted with the same care as other parts, so that vessels of any shape may be completed without recourse to the old process of hammering.

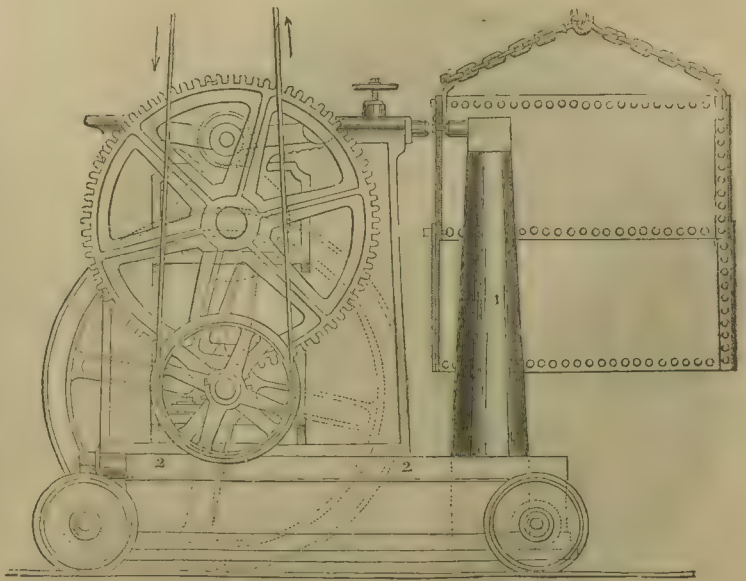


CHUBB'S BANKERS' SAFE-LOCK.

rior arrangement to a new and more complex one at any moment, it is accomplished simply by altering the arrangement of the bits in the key; and this is accomplished without removing the lock, or any part of it, from its position on the door. Its operation is as follows:—At the closing or locking of the lock, whilst the bolt is projecting, the moveable combination parts assume precisely the position prescribed to them by the key, according to the particular arrangement of its bits at the time the key is turned. The combination parts do not consist in one set of tumblers only, such as are found in most other locks, but there are three distinct sets or



CHUBB'S FIRE-PROOF SAFE.



MESSRS. FAIRBAIN'S PATENT RIVETING MACHINE.

[illegible]



CENTRE-PIECE FOR TABLE.—BY VITTOZ.—(SEE NEXT PAGE.)

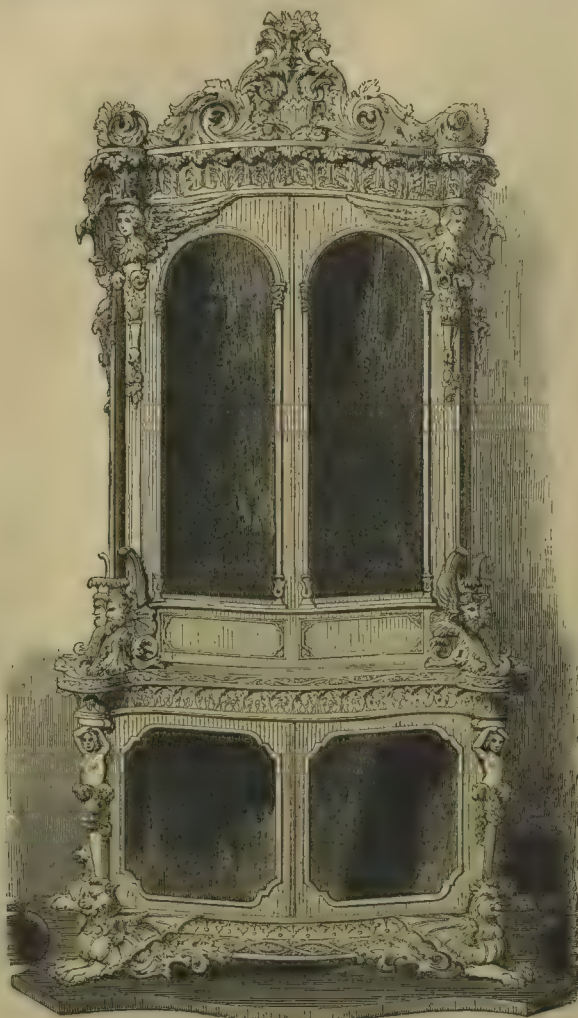


STAINED WINDOW.—BY GIBSON, NEWCASTLE.

The Norman tracery window, by Gibson, of Newcastle, the upper part of which is engraved above, is a rich specimen of the art. In the central compartment is represented the Nativity; and in the four principal compartments above and below it, two and two, are the four principal prophets, Moses, David, Isaiah, and John the Baptist. The arrangement is simple and effective, and the colouring extremely rich.



CABINET.—FROM TUSCANY.—(SEE NEXT PAGE.)



CABINET.—BY W. AND C. FREEMAN, NORWICH.—(SEE NEXT PAGE.)

JEWELLED HAWK, EXHIBITED BY THE DUKE OF DEVONSHIRE.

The Jewelled Hawk, the property of the Duke of Devonshire, is a new contribution to the Netherlands department, being located not far from Mr. Hope's jewels, with which it divides the attention of the virtuosi. The history of this bird is not without interest. It rejoices in a name proper, being the "Knyphausen Hawk," and was made, many a



JEWELLED HAWK.—DUKE OF DEVONSHIRE.

long year ago, to commemorate the reconciliation of two noble Dutch families which had been long at variance. It contains within its ray plumage the identical gold drinking cup which was used by the rival Counts upon the auspicious day of their reconciling, and which is discovered upon removing the head of the bird. The wings and body are chiefly covered with rubies; turquoises, emeralds, and other precious stones are displayed in other parts. The bird stands about a foot high, more or less, and has a very stately appearance.

THE NATURAL HISTORY OF THE EXHIBITION.

TAKEN in its widest sense, the title we have just written would indicate an essay on almost all the products—animal, vegetable, and mineral—of the world; for almost all these products, at all events all the most remarkable among them, are to be found represented in Hyde-Park. Not having any intention, however, of trying to solve the problem of making the smaller contain the greater, or of decanting the Atlantic into a pint bottle, we propose merely to indicate the reminiscences of animated nature, as connected with stuffed specimens of birds and beasts, suggested by the Exhibition. We have thought that, amid the countless columns which are being written upon the industry and ingenuity manifested by the Exhibition, and the unending accounts of processes of manufacture and industrial art, with which the periodical press of the day teems, a paper, leaping from certain exhibited specimens, not forwards to great industrial establishments and singular displays of mechanical skill, but backwards to the productions of that master-worker, Nature—a paper leading the reader from the specimens exhibited, not to factories, foundries, or laboratories, but to woods and mountains, rocks and rivers, would come with a certain freshness upon the mind, and be an acceptable relief from the accumulated and accumulating accounts of the results and the processes connected with the industry of man.

The art of taxidermy is to a great extent misunderstood and perverted. If the mass of the fur or feathers can be tolerably preserved, and something like a rude approximation to the appearance of the living animal be given, the end of the operation is, in the majority of cases, deemed to be attained. We are happy to say, however, that in the Exhibition are to be found several specimens shewing a very different idea of the functions and capability of the art. And we were also gratified by observing in the contributions from Canada a number of well-stuffed birds, labelled as presented by the stuffer to Charles Waterton. The author of "Wanderings in South America" is, indeed, almost the father of taxidermy, as properly understood. We have not at hand at this moment that delightful book of the wilderness, but we remember that it contains an earnest protest against the old plan of stuffing, and a well-merited denunciation of the monstrosities which

CENTRE-PIECE. VITTOZ.

This magnificent *surcous de table* was manufactured by Vittoz, of Paris, for the Grand Duchess of Russia. The design is sumptuous and elegant, and it is executed in bronze richly gilt. This work is a favourable specimen of French decorative art, and will be much admired.

CARVED CABINET. BARBOTTI.

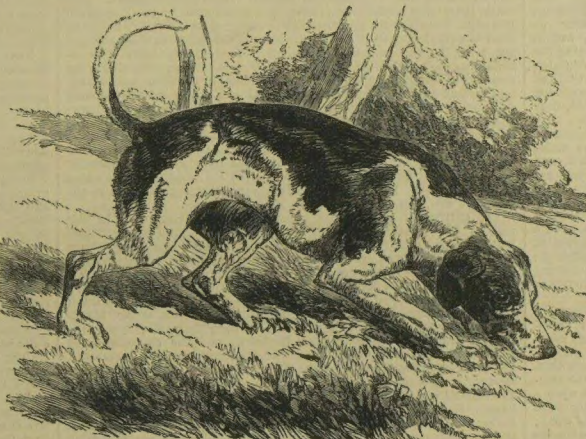
We have already given representations of some of Barbotti's beautiful productions in wood carving. We now produce an Engraving of a work of more importance than any of those referred to, and which may justly be signalled as one of the gems of the Tuscan department. This beautiful cabinet, in walnut-tree wood, is of classic and elegant form, and every portion of its surface is covered with sculpture of rich and appropriate character. The principal subjects on the panels are from the "Iliad," which are rendered with a degree of spirit in the conception, and a delicacy of execution, which can scarcely be excelled.

CABINET. BY FREEMAN.

The ornamental cabinet, secretary, and book-case, carved in walnut wood and ebony, by W. and C. Freeman, of Norwich, is meritorious in many respects, but betrays the fault of over-decoration, without any fixed principle of design. Cherubim, dragons, terminals, and other fabulous creations are brought in plentifully to aid the general effect, which is one of confusion. The workmanship is good.



STUFFED FROGS.—FROM WIRTEMBERG.—FROM A DAGUERRETYPE BY CLAUDET.



STUFFED POINTER.

are exhibited as lions and tigers in too many of our museums. It is of course the heads and faces of the animals which are principally deficient. Not only is all natural expression utterly and irremediably lost, but the lips and nostrils are frequently so ill preserved as to have shrunk back, producing a spectral-like appearance which would have frightened even the original *fera* if he had come across one of his kindred, decorated with such a ghastly grin. In some cases, Mr. Waterton observes, that the head of the animal has been entirely cut off and replaced by a painted wooden block, resembling the original countenance about as much as a ship's figure-head generally does the gentleman after whom it has been christened. Mr. Waterton, if we mistake not, invented a new preservative and antiseptic liquid to prevent the shrinking of the cartilaginous and mucous portions of the face; but what he insisted principally upon, and what we also wish to reiterate, is, that the mere preservation of skin and feature is but a small part of what taxidermy ought to be—that the character, gait, and general air of the animal ought to be copied; and that a stuffed specimen is only half preserved which does not give a correct idea of the habitual gestures and mode of standing of the original. For example, there is the badger, a stout, bluff, sturdy, inflexible-looking creature. What a perfect antithesis is the cat, with its habitual crouch and wonderful air of supple springiness. Contrast the curious pert look of a sparrow, especially if he be a Cockney one, with the more staid and decently reserved aspect of any other small bird of a similar species. The acuteness of the look of some dumb creatures as compared with the dismal fatuity of others, is very remarkable; and if the reader who has not much studied the subject will refer to what we may call the comic character stuffed animals from Wirtemberg, he will see an exceedingly clever exaggeration of the intelligence and shrewdness of a fox's face and of the simple stupidity of a hare's. In this case the artist has



STUFFED CATS.—FROM WIRTEMBERG.—FROM A DAGUERRETYPE BY CLAUDET.

Well, the sight on it soon settled 'em,—as well as the fellers at the doors, and in I went, and for the matter of ten or fifteen minutes I

as like a feather in an eddy, whirl'd round and round oncesing, and carried here and there without power to move, or stop, or hold on as I liked: I found myself in the middle of above twenty thousand people, all scuttling about for places, and not at all the wust ones; and I s'pose it wouldn't have stopp'd all day, but that all of a sudden the doors were closed and the police sung out "the Queen," and then "to places" was the word, and in less than half a minit the scrambling was all over, and the great, hurrying, whirling current became a solid body, and stood as still, and pale, and silent as tho' it had suddenly got frozen by some new great force of chemistry; and, as good fortune chose to have it, I was one of the particles within sight of the Royal platform—in what they call the Transept, right afore the chair and canopy—the how I got there, marsy knows, and two of the policemen—

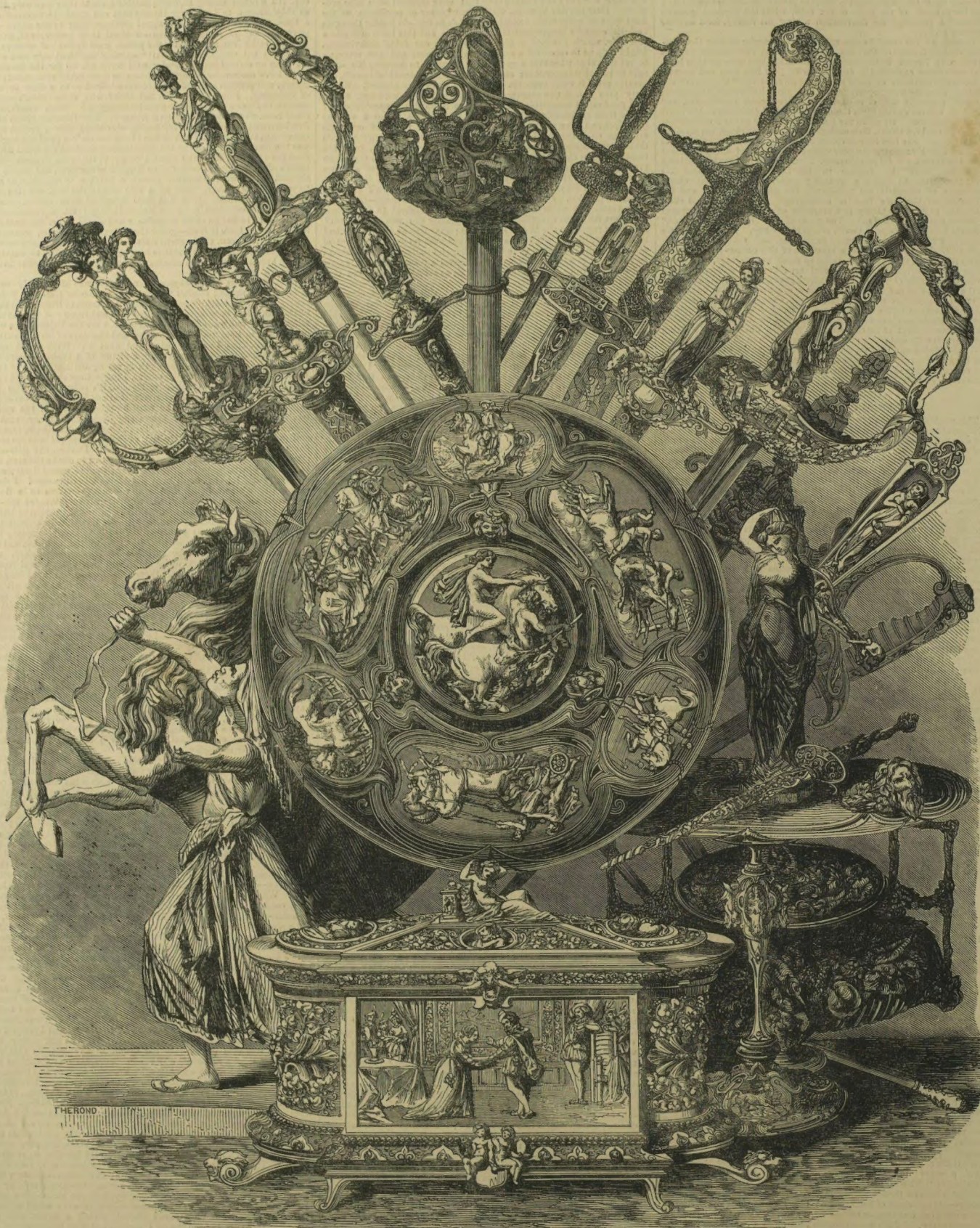
and having this position, the very best in the whole building, you'll naterally expect me to give an account of all that happen'd—to give a full and clear detail of the hull inaugurating sarrymony. Well, all I can say is this, Deacon, that when I looked up and saw above me that gorgeous arch of glass, that seem'd to be hung up in the air, as a bridge for the feet of angels, and when I view'd the very beings, angelsthemselfs, by thousands, young, and pure, and beautiful, in their white and shining dresses, bending over the great galleries or lengthening out in lines below, with looks that seem'd only made to shine with praise or mercy; when the sun too burst upon 'em, as tho' the heavens at that moment were smiling down on their lost tenants, and the great organs began to play the grandest mammoth kind of music, and the excellent Queen herself came to take her seat among her sisters, as the pattern of the

whole and the type of their good influence, and the chorus then burst out, as I thought from heaven itself, in a grand and solemn strain of homage and thanksgiving—a strain cherubs might have sung, and thousands did about me—when I saw and heard all this, Deacon, why I confess I lost my senses;—they went clean off altogether, I was whirled up into a dream or trance, and thought I'd done with the world for ever;—so, as for seeing or hearing arterwards, and noting anything so poor as forms, and shows, and sarrymonies, mine warn't at all the soul, Deacon, and I refer you to the noospapers.

Your respectful and affectionate

PELEG E. WHEELER.

(To be continued.)



GROUP OF ORNAMENTED ARMS, CUP, &c. BY GUEYTON.

GROUP OF ORNAMENTED ARMS, CUP, &c. BY GUEYTON.

M. Gueyton's display of artistic silver-work is very splendid, and its examination will gratify a higher taste than that of mere idle curiosity. This exhibitor also pretends to a new and improved method of electroplating, by which the expense is much lessened, leaving, necessarily, a larger proportion of the price of the article produced to reward the labours of the designer and fashioner. The group of objects which we engrave comprises a variety of sword-handles, in gold and silver, most

admirably decorated with sculpture and engraving, and chasing and precious stones, in various manners; a dressing-case, of pure *Rococo* style; and a prize cup, or racing plate. The last-named work is extremely interesting, the subjects being most appropriate and happily chosen, and the execution in the very best style of art. It represents, as will be observed, the principal phases in the history (natural and educational) of the horse—the three principal being the ancient chariot-race, the medieval tournament, and the modern race—"the race" *par excellence*. In the intermediate spaces we see the interesting quadruped

first as a colt by the side of his dam; next in the stable; and in the last place, proudly bearing his master, a gallant cavalier, across the country, probably to the wars. In the centre is a group representing the education of Achilles by the Centaur.

London: Printed and Published at the Office, 138 Strand, in the Parish of St. Clement Danes, in the County of Middlesex, by WILLIAM LITTLE, 138, Strand, aforesaid.—SATURDAY JULY 26, 1851.—SUPPLEMENT.